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*The Peerless Macedon, childe of triumph, who presents his armes, his arte of warre, Glorious unto*

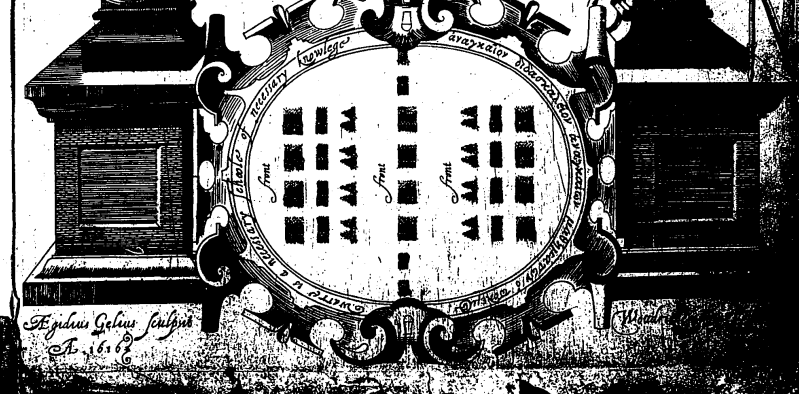
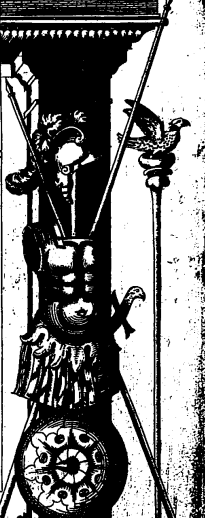
# THE TACTIKS OF ÆLIAN

Or art of embattailing an army after y<sup>e</sup> Grecian manner

Englised & illustrated w<sup>th</sup> figures throughout & notes vpon y<sup>e</sup> Chapters of y<sup>e</sup> ordinary motions of y<sup>e</sup> Phalange by J.B.

The exercise military of y<sup>e</sup> English by y<sup>e</sup> order of that great Generall Maurice of Nassau Prince of Orange &c. Governour & Generall of y<sup>e</sup> mixed Provinces is added

Printed in London for Laurence Lish & are to be sold at his shoppe at y<sup>e</sup> signe of the Tiger Head in Pauls Church-yard



*Ægulus Galus sculpsit  
An. 1612*

Harvard College Library  
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Mrs. E. D. Brandegee  
Nov. 9, 1908.



# TO THE HIGH AND MIGHTY CHARLES, ONLY

SONNE OF HIS MAIESTY, PRINCE OF  
Wales, D V K E of Cornewall, Yorke, and Albany, MAR-  
Q V I S E of Ormont, E A R L E of Chester, and Rosß,  
L O R D of Admanoch, and K N I G H T of the  
*most noble order of the Garter.*



OW much the *Græcians* excelled all o-  
ther Nations in the Sciences called  
Liberall, is better knowne in gene-  
rall, then needfull at this time parti-  
cularly to be rehearsed to your *Hig-  
hnesse*. The *Romans* themselues albeit  
otherwise ambitious, and out of mea-  
sure thirsty of honour, and challen-  
ging to themselues the highest degree of grauity, constan-  
cie, greatnesse of minde, wisedom, faith, and skill of war,  
contended not herein, but freely left them the possession  
of that praise vnquestioned. For warre it is not my pur-  
pose at this time to make comparision, or commit the two  
Nations together. The controuersie is already moued by  
other, and hangeth vndecided in the Court of learning.  
Thus much, me thinks, I may truly affirme, that the *Gra-  
ecians* were the first, that out of variety of actions, and long  
experience reduced the knowledge of Armes into an Art,  
and gaue precepts for the orderly mouing a Battaille, and  
taught, that the moments of victory rested not in the  
hands

hands of multitudes, but in a few men rightly instructed to manage armes, and trained vp in the obseruation of the discipline of the field. In which regard they had almost in all Cities amongst them Masters of Armes, whom they called *Tacticks*, which deliuered the Arte Military to such, as were desirous to learne. Out of whose Schooles issued those chiefs of warre in number so many, in skill so exquisite, in valor so peerelesse, in all vertues befitting great Generals so admirable, that no Nation of *Europe* euen to this day hath been able to match, much lesse to ouer-match their fame, and glory. And the time was when the *Lacedemonians* exceeded the rest in Martiall skill, and were thought to be the best Souldiers of *Greece*; by meanes whereof they aduanced themselues to the Principality of *Greece*, which they held with such reputation, that an enemy by the space of 500 yeares was not seene within their Territory. Till at last growing insolent, and surfeiting of, and being not able to brooke their owne fortune, they fought to oppresse, and with wrong and force to possess the City of *Thebes*, and stirred vp *Epaminondas* a *Theban* by birth, and from his tender yeares nourished by his fathers care in the study of Philosophy, and the science of Armes, to oppose against them, who in two battailes, the one at *Leuctra*, the other at *Mantineia* so broke their forces, that from that day forth they were neuer able to recouer their wonted authority, and power in the field. *Philip* the sonne of *Amyntas* King of *Macedonia*, being but a private man, was deliuered as a hostage to the *Thebans*, & brought vp in the same house and learning with *Epaminondas*. He afterward became King of *Macedonia*; which being of it selfe but a poore kingdom, and before his time sometimes kept vnder by the *Athenians*, sometimes by the *Lacedemonians*, sometimes by the *Thebans*, & finding it at his entrance

to

to the Crowne harried, and spoiled by the *Peonians*, and forced to pay tribute by the *Thyrians*, by erecting a new arte, and discipline of warre, to which he exercised, and enured his *Macedonians*, he not only freed his Countrey from the Barbarous nations, but also ouercame the *Gracians*, accounted the only Masters of armes till that day, and caused himselfe to be declared Generall of *Greece* against the *Persians*: against whom after he had made his full preparation, he resolved to go in person. But being preuented by death, he left the succession of his kingdom, and execution of his designs to *Alexander* his sonne, whom he had before curiously instructed in the discipline of Armes inuented by himselfe. The same *Alexander* (being about 20 yeares of age) after he had vanquished *Darius* in 2 great battailes in 12 yeeres ran through, and subiected the spacious, rich, and flourishing kingdomes of *Asia*, euen as far, as the *East Indies*, and with terror of armes made the whole world to tremble at his name. His kingdomes were after his death diuided amongst many Successors, who by the same Arte military easily maintained the possession of their conquests. This Arte is it, that I at this time present vnto your Highnesse. It was comprised in writing by many, and yet none of their works attained our age, but only that of *Ælian*; who hath in a small volume so expressed the arte, that nothing is more short, nothing more linked together in coherence of precepts, and yet distinguished with such variety, that all motions requisite, or to be vsed in a Battaille are fully expressed therein. *Ælian* liued in the time of *Adrian* the Emperor. How much the booke was of ancient time esteemed may appeare by this alone, that *Leo* a succeeding Emperor setting downe Martiall instructions for the government of his Empire, transcribeth whole passages out of *Ælian*, & whensoever he citeth, or nameth the *Tacticks*, he giueth still the first place vnto *Ælian*.

Howbeit

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Howbeit the practise of *Ælians* precepts hath long lien wrapped vp in darknes, & buried (as it were) in the ruines of time, vntill it was reuiued, & restored to light not long since in the vnited Prouinces of the low-Countries, which Countries at this day are the Schoole of war, whither the most Martiall spirits of *Europe* resort to lay downe the Apprentiship of their seruice in Armes, and it was reuiued by the direction of that Heroicall Prince *Maurice* of *Nassau*, Prince of *Orange*, Gouvernour, and Generall of the said Countries, a Prince borne and bred vp in Armes, and (beside the completenes of his other eminent vertues) for skill, experience, iudgement, and military literature comparable to the greatest Generals, that euer were. I haue of late aduentured to take from *Ælian* his *Greekish* cloake, and to put him in *English* apparell, that in that habit he might attend your Highnesse, and be ready with his seruice, in case he were thought worthy of employment. He had before for his Patron *Adrian*, an Emperor, and Ruler of the *Roman* world. Now he humbly craueth your HIGHNESSE fauour for his protection, who as in Princely descent, and succession of Royall blood you are farre superior, so in vertues worthy of your birth, and yeares, and in all hopefull expectations are you nothing inferior to *Adrian*. It may please your Highnesse to regard him with a gracious eye, and to esteeme the Presentor of him your faithfull bedesman, that will not cease to pray to the mighty God of hosts, to giue you conquest ouer all your enemies. From my Garrison at *Woudrichem* in *Holland* the 20. of September 1616.

Your Highnesse most humbly  
 deuoted,  
 Io: BINGHAM.



THE TACTICKS OF *ÆLIAN*  
 or art of embattailing an army after the  
*Grecian* manner.



THE *Grecian* arte of embattailing an army (most mightie *Augustus Cesar Adrian*) the antiquitie whereof reacheth back to the age wherein *Homer* lyved, hath beene committed to wryting by many, whose skill in the *Mathematicks* was not reputed equal with myne: whereby I was induced to thinke it possible for me soe to deliver the groundes therof, that posteritie should rather regard and esteeme my labors, then theirs, that before me haue handled the same argument. But weighing againe myn own ignorance (for I must confesse a truth) in that skill & practise of armes, which is now in esteeme among the *Romaines*, I was by feare with-held from reuiuing a science half dead, as it were, and since the invention of that other by your auncestors, altogether out of request and vnregarded. Notwithstanding comming afterward to *Formie* to doe my dutie to the <sup>1</sup> Emperour *Nerva* your maiesties father, It was my fortune to spend sometime with <sup>2</sup> *Frontine* a man of Consular dignitie, and of great reputacion by reason of his experience

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in militarie affaires : and after conference with him perceiving he imparted no lesse studie to the *Grecian*, then to the *Romaine* discipline of armes I began not to despise that of the *Grecians*, conceiving that *Frontine* would not so much affect it, if hee thought it inferiour to the *Romaine*. Having therefore in times past framed a project of this worke, but yet not daring then to publish it in regard of <sup>3</sup> your majesties incomparable valour, and experience, which make you famous about all Generalis without exception, that euer were : I haue of late taken it againe in hand, & finished it, being (if I deceaue not my self) a worke both worthy to be accompted of, & of sufficiency, especially with such as are studious of the arte, to obscure the credit of the auncient *Tacticks*. For in respect of the perspicuitie I dare bouldly affirme, the reader shall more advantage himselfe by this little volume, then by all their writings : such is the order and methode, I haue followed. Howbeit I durst scarcely offer it to your majestie who haue beene Generall of so greate warres, least happily it proue too too slender a present, & altogether vnworthy of your sacred viewe. And yet if your majestie shall bee pleased to thinke of it, as of a *Greekish Theorie*, or a various discourse it may bee, it will giue you some little delight, the rather because you may therein behold <sup>4</sup> *Alexander the Macedons* manner of marshalling his fields. And for that I am not ignorant of your majesties more weightie affaires, I haue reparted it into chapters, to the end you may without reading the booke in few wordes take the somme of that, which is to bee delivered, and without losse of time find the places you are desirous to peruse.

Notes.

Notes.

**THE Tacticks]** As *Taxis* in a general sense signifieth order, so *Tacticos* is as much, as pertaining to order : but specially taken, it signifieth pertaining to order of a battaile, or to the embattailing of an army. Hereof the arte of embattailing an army is called *Tactice*, and hee, that is skillful, and experienced in that arte, *Tacticos* (<sup>a</sup> *Vegetius* nameth him *magistrum armorum*) and the books written of the arte, *Tactica*. And that this is the true signification of the word may appeare by *Xenophon's Cyropædia*, where the arte *Tactick* is distinguished from the arte *Imperatory*, or arte of a Generall. Hee induceth *Cyrus*, in a discourse with his father speaking thus : <sup>b</sup> In the end you asked mee what my master taught mee, when hee professed to teach the arte *Imperatory*. And when I answered, the *Tacticks*, you smiled, and asked particularly, what the *Tacticks* availed without provision of things necessary to lue by : what without preservation of health ? what without knowledge of arts invented for the vse of warre ? what without obedience ? so that you plainly shewed, that the *Tacticks* are but a small portion of the arte *Imperatory*, or of commanding an army. Thus *Xenophon* : making a difference between the arte *Imperatory*, & the arte *Tactick*. And in other place hee speaketh yet more particularly : <sup>c</sup> *Cyrus*, sayd hee, esteemed it not the duty of a *Tactick* to enlarge onely, or to stretch out in length the front of his *Phalange*, or to drawe it out in depth, or to reduce it from a winge to a *Phalange*, or to countermarche readily, the enemy shewing himselfe on the right, or left hand, or in the rear, but to diuide it, when need is, & to place euery part for most advantage, & to leade it on speedily, when occasion is of prevention, yet sometimes in a general signification books entreating of the whole arte of warre are called *Tacticks* : as the *Constitutions military* of the Emperour *Leo* are entituled *Tactica Leonis*, perhaps of the best parte, because the <sup>d</sup> arte of embattailing an army hath alwayes been esteemed the chiefest point of skill in a Generall. Howbeit *Ælian* in his title of this booke taketh *Tactice* in the stricter signification : as appeareth by the definitions, he allegeth out of *Æneas* and *Polibius* : of whom the first defineth the arte *Tactick* to bee a science of warlike motion ; with whom also <sup>e</sup> *Leo* agreeth : the other, to bee a skill, whereby, a man taking a multitude serviceable, ordereth it into files, and bodies, and instructeth it sufficiently in all things appertaining to warre. Which two definitions comprehend few words the argument of the whole booke. For first *Ælian* intreateth of leuieng, & of arming men, then of filing, next of joyning files, and making bodies, after of ordering the whole *Phalange*, or battaile, further of motions requisit to affront the enemy, whersoeuer he giueth on, whether in front, flank, or reare ; lastly of marching, and of the sondry formes of battailes carieng with them advantage of charging or repulsing the enemy in your marche. He ; that will further vnderstand the boundes of this arte, let him reade in the 21. chapter of *Leo* the 8. section.

<sup>1</sup> The Emperour *Nerva* your maiesties Father] The Emperour *Nerva* here mentioned was not *Nerva Cocceius*, whose succeeded *Domitian*, but *Vipius Traianus*, who was also called *Nerva*, because he was adopted by *Nerva Cocceius*, & succeeded in the Empire. And where *Ælian* termeth him *Adrians* father, indeed *Adrian* pretended, he was *Traians* sonne by adoption. But <sup>2</sup> *Dio* plainly denieth it, & *Spartian* saith, some reported hee was adopted by the faction of *Plotina* (*Traians* wife) by substituting one to speake with a faint voice, as if it had beene *Traian* vpon his death-bed, whereas *Traian* was before departed this world. This is agreed, that he was *Cosin*

A 2

germas

<sup>a</sup> *Veget. prol. lib. 2.*<sup>b</sup> *Xenophon cy. top. lib. 8 c. 27.*<sup>c</sup> *Xenophon cy. top. lib. 8 c. 27.*<sup>d</sup> *Plotin Philo. pement. infra cap. 3.*<sup>e</sup> *Leo. cap. 1.*<sup>f</sup> *Dio & Spartian. in vita. Adrian.*

## The Tacticks

german once removed to Traian, & that his father dieng, he (being but ten yeares olde) was ward to Traian (then a private man) and to one Calius Taitianus.

2 To spend some time with Frontine] Frontine heer mentioned was the same that wrote the book of Strategemes, now extant, & commonly ioyned in one volume with Vegetius. Hee was a man curious in the search of the Gracian discipline, as may be seene by his owne preface to his bookes of Strategemes: & by the testimony of Aelian, & in the first chapter of this treatise, is reckoned amongst the Tactick writers. <sup>a</sup> Vegetius reporteth he was much esteemed by the Emperour Traian. Hee lived also in greates reputation in the time of Vespasian: at least if it bee hee, that Tacitus speaketh of in the life of Iulius Agricola. And yet it might bee he very well, there being noe more then twenty yeares, & certeine monthes betwixte the reigne of Traian, & the reigne of Vespasian in whose time Frontine is reported by <sup>b</sup> Tacitus to have overthrowne the Silures in Britaine. Aelian in the next chapter calleth him Fronto. Of one Fronto, that was Consul in the third year of the reigne of Traian, I read in <sup>c</sup> Dio: whose saying is reported to have beene: That it was ill to haue an Emperour, vnder whome noe man might haue liberty to doe any thing, but much worse to haue an Emperour, vnder whome every man might doe what hee list. But this Fronto was not Aelians Fronto. Hee was called Marcus Cornelius Fronto; this (that Aelian speaketh of) Iulius Frontine. And yet it is noe wonder that Frontine in Latine should be called Fronto in Greeke, it being vsual for the Gracians to varie, and deflect a litle from the property of the Latine names.

3 Your maiesties incomparable valor & experience] That this praise given Adrian is not altogether without cause, may appeare by that which <sup>d</sup> Aelius Spartianus writeth in the life of Adria. His wordes haue this meaning: After this, taking his journey into France, he was bowntifull to all, as he sawe cause. From thence hee passed into Germany, & being rather desirous of peace, then warre, yet hee so exercised his souldiers, as though warre were at hand; teaching them to indure paines & hardnesse, himselfe giving an example of military life: gladly also vsing Camp fare, as namely lard, & cheefe, for meate, & water mingled with vineger for drink, in imitation of Scipio Aemilianus, & of Metellus, & of Traian the author of his preferment & rising, bestowing rewardes vpon many, honors vpon some, to encourage them to beare such things, as seemed harsh in his commaundes. And surely it was hee next Octavius, that vpheld military discipline (declining nowe through the remissenesse of former Emperours) by offering both the places of Commaunde, & the payes, never suffering any man to absent himselfe from the Campe, but vpon iust cause: measuring the worthe of Tribunes not by fauour of the souldiers, but by their owne desert, exhorting, & exciting all the rest by example of his owne vertue, whilst hee often marched twenty miles on foote, being fully armed, broke downe banquetting howses, and galleries, & vaults for coolenesse, & arbors, wherefoever hee found them in the Campe; & was seene in a plaine garment vsually wore a baudricke not garnished with gold, buttons without gemmes, scarcely allowing an ivory handle to his sword, visited his sick souldiers in their lodgings, himselfe chose out the grownd to encampe in: made noe Captaine, but a man of a strong body, noe Tribune, but with a growne beard, or of age, that by prudence, and yeares was able to sway the weight of the place: nor suffered him to take ought from the souldier; removed all delicacies; and lastly reformed theire armes, and baggage. Hee had besides consideration of the age of souldiers, allowing none younger, then was befitting vertue; nor elder, then stood with the lawes of humanity, to bee conuersant in the Campe, contrary

<sup>a</sup> Veget lib. 1. cap. 3.

<sup>b</sup> Tacit. in vita Agricole.

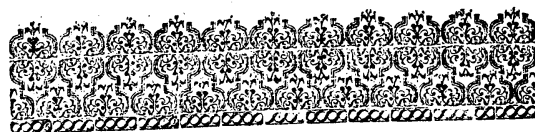
<sup>c</sup> Dio in vita Nerva.

<sup>d</sup> Spartian in vita Adria.

## of Aelian.

trary to old custome, and vsage: and gaue himselfe to haue particular knowledge of them all, and what their number was. Furthermore he was carefull to vnderstand the controuerxies betwixt fouldier and fouldier, and searched with great attentiuenesse into the revenues of the Provinces, to the end to supply, what was wanting; endeavouring notwithstanding aboue all neither to buy, nor feede ought, that was not for vse. Wherefore when he had fashioned his souldiers to his owne example, he passed over into Britaine, where he corrected many things, and was the first that drew a wall a-long by the pace of eighty mile; wherewith he diuided the Romans from the barbarous people. *Hitherto Spartian. I haue recited the historie at large, because I might represent the picture of an excellent Generall.*

4 Alexander the Macedons manner.] That this booke comprehendeth the Macedonian discipline of armes, I will shew hereafter, as particulars offer themselves. In the meane time let this suffice for an argument, that Aelian doubteth not to affirme it to Adrian, a Prince excellently learned in the Greeke language; and as by reason of skill he was able to discern, so by his authoritie he would haue censured so grosse an escape, if it had bene otherwise, than Aelian reporteth.



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The



The Authors that have written Tatticks; of this booke, and  
of the profit of the Arte.

CHAP. I.



Omer the Poet seemeth to be the first, (at least we read of) that had the  
skill of imbattailing an Army, and that admired men indued with that  
knowledge; as appeareth by *Megasthenes* of whom he writeth,

*His like no living wight was found, nor any age did yeild,  
To marshall Troopes of horse, or bands of foote in bloody field.*

Concerning *Homer's* discipline militarie, the workes of *Stratocles*, and of *Frontine* a man of Consular dignitie in our time are to be read. *Ælian* perfected the  
Theorie thereof at large publishing many volumes of warfare, which were abrid-  
ged by *Cyneas* the *Thessalian*. Likewise *Pyrrhus* the Epirote wrote *Tatticks*, and  
his sonne *Alexander*, and *Clearchus*, and *Pausanias*, and *Euangelus*, and *Polybius*  
the *Megapolitan* (a man of great learning, *Scipio's* companion) and *Eupolemus*, and  
*Iphicrates*; *Possidonius* also the *Stoick* set forth the art of warre, and many other,  
some in Introductions, as *Brion*, some in large *Tattick* volumes. All which, I have  
seene, and read, and yet thinke it not much to purpose to mention particularly;  
being not ignorant, that it hath bene the manner of those writers for the most  
part, to apply their stile not to the ignorant, but to such as are already acquaint-  
ed with the matters they intreat of. As for the impediments, which presented  
themselues to me, when I first gaue my minde to the studie of this Art, as name-  
ly neither to happen vpon sufficient Instructors, nor yet to find light, or perpi-  
cuitie enough in the precepts delivered; I will endeavour, as much as I can, to re-  
moue out of other mens way: And as often as words shall faile to expresse my  
meaning, I will for plainenesse sake, vse the direction of figures, and pourtraicts,  
adioyning thereby the view of the eye, as an aide, and assistance, to the vnder-  
standing, and withall reiteine the termes of auncient Authors, to the end, that  
whofoever shall follow this booke for an introduction, being therein exercised  
both to the same words; and also to the vñage of things expressed in them, may  
grow as it were acquainted, and imagine himselfe no stranger, when he com-  
meth to read their workes. By which waies by me prescribed, I make no doubt,  
they will easily be vnderstood. Now that this Art of all other is of most vse, may  
appeare by *Plato* in his booke of Lawes, where he saith; *That the Cretan Law-  
giver so contriued his Lawes, as if men were alway prepared to fight. For all Cities haue  
by nature vnproclaime'd warre one against another. Which being so: what discipline  
is more to be esteemed, or more auaylable to mans life, then this of warre?*

A 4

Notes.

## Notes.

**I**t seemeth by this Chapter, that the Authors, that haue of ancient time written Tacticks, haue bene many: and those not of such kinde of men, as haue giuen themselves to study, and contemplation alone, but of such, as besides their knowledge in good letters, haue bene actors in warre themselves; (which is more) principall actors, some of them Generalls, other the next degree to Generalls. Howbeit there is none here mentioned by *Ælian*, whose works are extant. Whereby may be esteemed the inestimable losse, these latter ages haue suffered, in being deprived of such excellent monuments. I hope, I may so terme them without offence, though I haue not seene them. For what but excellent, can proceed from men of such excellencie in their profession? such as the most part of those were. Yet for some of them I can say nothing, as finding little remembrance of them in ancient writers. Of this kind are Eupolemus, Stratocles, Hermias, Clearchus, Paulanias: albeit such names may often be found: The rest are specially mentioned, and much commended. Of whom I will set downe, what I finde.

1 Frontine a man of Confular dignity. I haue before noted somewhat of Frontine. We haue of his, as it is thought, other works, besides his stratagemes: but this booke of Tacticks, whereof *Ælian* speaketh, we haue not. I will only adde the relation of *Ælian*, touching Frontine, who writeth thus: Cato the elder, albeit he had bene both invincible in armes, and often Generall of great Armies, beleueed yet he should more profit his Countrey, if he laid downe in writing the discipline of warre. For valiant acts are but of one mans age, but things written for the profit of the State endure for euer. Many other haue done the like, but especially Frontine; whose industry herein was greatly approved by the Emperour Traian.

2 Aeneas perfected the Theory. Aeneas is mentioned by Polybius in his tenth booke, where he discourseth of signes to be made by beacons of fire, in case an enemy approacheth to any part of our Countrey. His bookes were intituled, Commentaries of the office of a Generall, as Polybius saith; and *Ælian* here calleth them, Bookes of the office of a Generall, the title being all one in effect. Of these bookes none haue reached to our age, but one alone, which compriseth precepts of defending a Towne besieged, and some 5 or 6 yeeres agoe came first to light, and print: that worthy man Isaac Casaubon, the learned ornament of his Countrey, (and of England so long, as he liued there) being the setter forth. And it is adioyned to his edition of Polybius. These bookes Tactick of Aeneas were abridged (as *Ælian* saith) by

3 Cyneas the Thessalian. Plutarch in the life of Pyrrhus telleth vs what Cyneas was. There was, saith he, in the Court of Pyrrhus a Thessalian, a man of great vnderstanding: and who hauing heard the Orator Demosthenes, seemed alone of all, that then were esteemed eloquent, to renew in the memory of the hearers an image and shadow of the vehemencie and vigor of his vtterance, Pyrrhus held him in his Court, and made vse of him, in sending him in embassage to people and Cities. In which embassages hee confirmed the saying of Euripides.

What euer force can doe, with trenchant swords;  
The same, or more, is wrought by pleasing words.

Therefore was Pyrrhus wont to say, that Cyneas had gained more Cities with his eloquence, then himselfe with armes. By occasion whereof hee did him

him great honor, & employed him in his principal affaires, Tully speaketh of his workes: your letters, (saith he to Papyrius Pætus) haue made me a great General. I was altogether ignorant of your so great skill in military matters. I see you haue read the books of Pyrrhus & Cynæas, I therefore purpose to follow your counsell: this yet more, to haue some few shippes in a readinesse vpon the sea-coast. They say, there is noe better armour against Parthian horsemen. But why sport wee? you knowe not, with what a General you haue to doe, I haue in this my government fully in practise expressed Xenophons institution of Cyrus: which before I had worne a pieces with reading, Pyrrhus & Cynæas, hee nameth, as two principall Authors of warlike discipline. And where he addeth Xenophon, whoe, though he be not named by *Ælian* amongst the Tactick writers, deserueth yet not to be pretermitted, hauing been both a great Comaunder, & besides writt largely of military matters, whose workes also are now extant; let vs see, what he saith of him in another place. Cyrus, saith he, is written by Xenophon, not according to the truthe of an history, but for a patterne of iust government. Whose wondrous grauity is by that Philosopher matched with singuler Curtisie, which bookes our Africanus, (and that not without cause) was neuer wont to let goe out of his handes, And of Africanus he reporteth the like in his Tusculan questions.

4 Pyrrhus the Epirote wrote Tacticks. Pyrrhus the K. of Epirus was of ancient time esteemed one of the best Generalls, that euer was. What Anniballs iudgement was of him, Livy reporteth, & Plutarch in the life of Pyrrhus. And Antigonus being demanded, whom hee thought the greatest general, then liuing, answered Pyrrhus. And where other Kings imitated Alexander the great in purple apparell in number of gardes about their persons, in carieng the necke a little awry, & in speaking lowde, hee alone represented him in exploitcs of armes, & in deedes of prowes, saith Plutarch. Plutarch saith likewise: Touching his skill in the arte military howe to order a battaile, and howe to bring his men to fighte with most advantage, a man may draw proofe sufficient out of the books, he wrote, of which bookes Tully spake in the last paragraph.

5 And his sonne Alexander. Pyrrhus had by his first wife Antigone a sonne called Ptolomey, by Lanassa, another called Alexander: & by Bircanna, the third named Helenus. All which albeit by race & inclination of nature they were Martial, yet brought he them vp, & from their birth framed & enured to armes. And the report is, when vpon a time one of them, yea a chylde, asked him, to which of them he would leaue his kingdom, to him, answered Pyrrhus, who shall haue the sharpest sword: Justin also makes mention of these three sonnes. Ptolomey was slaine at Sparta, as Justin would haue it. Plutarch saith he was slaine in the way betwixt Sparta & Argos. Alexander reigned after his fathers deasse, in the Realme of Epirus. That hee wrote Tacticks, I haue not read, but in *Ælian* onely.

6 And Evangelus. Plutarch discoursing of the studies of Philipæmen hath this in effect: He tooke noe delight to heare al kinde of discourses, nor to reade al books of Philosophy, but such onely, as might profit to the daylie increase of vertue, And hee read not willingly other passages of Homer, then such, as hee thought had some efficacy to moue a mans hart to prowes. But amongst, and aboue al other readings, he specially affected the Tacticks of Euangelus: & like wise the histories of the exploits of Alexander the great. This is al I finde of the Tacticks of Euangelus. I gesse notwithstanding, he was a choice author, because Philipæmen had him in such esteeme, of whom the same Plutarch writeth: That Greece bore him singuler affection, as the last vertuous man, which shee brought forth

foorth in her ould age, after so many great, and renowned Capitaines of ancient time; and alwayes augmented his power, and authority, as his glory encreased. In which respect a Roman, praising him, called him the last Grecian; meaning that after him Greece bred noe great, nor any personage in deed worthy of her.

7 And Polybius] It is the same Polybius, whose History, so much as is extant, that excellent learned man Isaac Casaubon translated into Latin, and set forth 1609. For his life and worth refer to the preface of the same Casaubon to Polybius his history. Hee had bene in Achaia, his owne country; Generall of the horse. Afterward being in displeasure with the Romans, hee lived long in prison at Rome: and was for his worth finally released by intercession of the greatest men of Rome: and became companion to Scipio Africanus the younger, with whom also he was at the siege and destruction of Carthage. His Tactics, whereof Aelian speaketh, are perished with other of his workes. Yet are there many passages dispersed heer, and there in his history, which argue his extraordinary skill in matters of warre. And it may seeme, that Aelian hath taken much from him both for matter, and wordes.

8 Iphicrates] Whoe will reade of Iphicrates, let him goe to <sup>a</sup> *Emilius Probus*, that writeth his life. His actes are also declared by Xenophon, and Diodorus Siculus, and Polyan, and Iustini and divers others, as the were incident to their generall histories. Hee was esteemed one of the best Generalls of his time: and was called out by name by Darius King of Persia to bee generall of the Gracians, his mercenaries, in the warre, hee had against the Egyptians: His fame and estimation was soe great with Alexander the great, that when his sonne (whose name was also Iphicrates) with other Gracians were taken prisoners by him, for that they came embassadours into Persia to Darius, hee not onely spared him for the love of the City of Athens, and for the remembrance of his fathers glory (<sup>b</sup> the wordes of Arrian) but held him about him in honour so long, as hee lived, and after his decesse sent his reliques to Athens, there to be interred by his friends, and kinnsfolk.

9 Posidonius the Stoick] Posidonius in his time was a Philosopher of high renowne, and of the sect, that were called Stoicks. Tully citeth him often in his workes. In the second booke of Tusculan questions hee recounteth, <sup>c</sup> that Pompey the great, on a time comminge to Rhodes, was desirous to heare him. But vnderstanding hee was extreame sick of the goutte, hee forbore not notwithstanding to visit him being a most noble philosopher: whome after hee had seene, and saluted, and vsed with honorable wordes, and told him, hee was fory, hee could not heare him discourse, you may, if you please, quoth Posidonius: and I will not suffer paine to bee cause, that to great a man seeke mee in vaine. Then, as hee lay in his bed, began hee gravely, and copiously, to dispute, that nothing was good, but that, which was honest. And when firebrands, as it were, of torment towched him to the quick amidst his disputation, he broke forth often into these wordes: Sorow, all this is nothing: *I though thou trouble me never so much, I will not yet confesse, that thou art of thy selfe evil. So Tully.* <sup>d</sup> Pliny likewise telleth, that Pompey, after the warre of Mithridates, going into the howse of Posidonius, a man famous in Philosophy, forbid his seriant to knock at the doore (as the manner was,) and the seriantes bundles of rodde (saith he) were submitted to a doore by him, to whom East & West had submitted the selfe, *The same* <sup>e</sup> Tully attributeth to this Posidonius the invention of a Sphere, whose particular conversions did worke the same in sonne & moone, and the other fixe planets, that is wrought by the motion of heauen euery day and night.

The

The preparation of whicke forces and division of them, and how they are armed.

## CHAP. II.

I will then beginne with such preparations as are absolutely necessary for service in warre, the forces whereof are of two sortes, the one Land forces, the other ship forces. Land forces are such, as fight on land: Ship forces such, as are ordered for fight in shippes vpon Sea, or Rivers. But the order of Sea service I will referre for another place, and intreat now of things pertayning to Land service. The levies then for land service are either of those, that fight, and mannage Armes, or else of those that fight not, but remaine in the campe for necessary uses. They fight that stand ordered in battle, and with armes [assail or] repulse the enemy. The rest fight not, as Phisitians, merchants, servants, and other, which follow the campe to minister vnto it. Such as fight, are either footemen, or Riders: footemen properly, that serue on foote. Of Riders, some vse Horses some Elephants. They, that vse Horses, are caried either one Horse back, or else in Chariotts. And these are the differences in generall. But in speciall the foote, and Horse receaue many other divisions; onely the Elephants, and Chariotts, neuer varie. Footemen then are reparted into three kindes, one being Armed, another Targettiers, the third light, or naked. <sup>a</sup> The Armed beare the heaviest furniture of all footemen vsing according to the Macedonian manner large, round, Targetts, and <sup>b</sup> longe Pikes: <sup>c</sup> The Light contrarywise beare the lightest, having neither Curace, nor Grene, nor longe, or round Targetts of any weight, but <sup>d</sup> flieng weapons onelie as <sup>e</sup> Arrowes, <sup>f</sup> Darts, <sup>g</sup> Stones either for hand, or sling. To this kind is referred the <sup>h</sup> armour of the Argilos, who hath his furniture like to the Macedonian, but some thing lighter. For hee carieth <sup>i</sup> a little slight Targett, <sup>j</sup> and his Pike is much shorter, then the Macedonian Pike: which manner of arming seemeth a meane betwixt the light, or naked, and that which is proper. lie called heauie: as being lighter, then the heauie, and heavier, then the light: and that is the cause, that many place it amongst the light.

The forces of Horse (which wee distinguished before from Chariotts) as being ordered in Troopes, are either <sup>k</sup> Cataphracts, or not Cataphracts. They are Cataphracts, that cover theire owne, and theire horses bodies all ouer with armour. Of not Cataphracts, some are Lauancers, some Acrobolists. <sup>l</sup> Lauancers are such as joyne with the enemy, and fight hand to hand with the Launce on horseback. Of these, some beare longe Targetts, and are therevpon called Targettiers: Other some Lauances alone without Targetts, who are properlie called <sup>m</sup> Lauancers, and of some Xesophori. <sup>n</sup> Acrobolists on horseback are such as fight a far of with flieng weapons. Of these, some vse darts, some bowes. They vse darts, whome wee call <sup>o</sup> Tarentines. Of Tarentines, there are two sortes; for some throw little <sup>p</sup> darts a farre of, and are termed Darters on horseback, but properlie Tarentines: others vse light darts, & <sup>q</sup> after they haue spent one, or two, close presently with the enemy like the Lauancers, which

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<sup>a</sup> Emilius Probus in vita Iphicratis. Xenophon. huius greci lib. 6. 587. B.C. Died sicul. lib. 115. 479. Polyan. lib. 2. in Iustini lib. 6. 631. B.C.

<sup>b</sup> Adrian. lib. 2. 42. 6.

<sup>c</sup> Tullius. questionum lib. 2. 146.

<sup>d</sup> Plin. natural. huius lib. 7. cap. 30. pag. 115.

<sup>e</sup> Cicero. de natura deorum lib. 3. 267.

wee spake of, and fight hand to hand. These in common speech are named light horsemen. So that of *Tarentines* some are properly called *Tarentines*, whose manner is to dart a far of. Some light horsemen, who joyne, and fight hand to hand. <sup>20</sup> The horsemen that use bowes are termed *Archers* on Horseback, and of some *Scythians*.

These then are the differences of such as are in the Campe, the kinds of Souldiers being in number nyne: Of footmen, armed, *Targetiers*, *Light armed*, or *naked*: Of horsemen *Lancers*, *Darters*, *Archers*, *Cataphracts*: And lastlic *Chariots*, and *Elephants*.

## Notes.

**I**N this Chapter the kinds of Souldiers are distinguished according to their severall armes borne in fight. And therefore of foote some are called armed, because they beare heavy armes; other light armed or naked, because they wear no defensive armes, other some *Targetiers*, because their chief defence rested in a slight target, wherewith they covered their bodies. The horse also have their appellation, as their armes are. And some are *Cataphracts*, because themselves & horses were armed completely, other *Lancers*, for that they used a lance: other some *Acrobolists*, by reason they fought with stinging weapons a farre of. The first thoughts of a Prince, or State, that is resolved to put an army into the field, ought to be to provide armes. Armes are the security of their own souldiers, the terror of the enemy, the assured ordinary means of victory. The antiquity of armes is all one with the beginning of warre. For when of ancient time mighty men puffed up with pride, and led by ambition, sought by violence to enlarge their empire, and to bring under subjection their bordering neighbours, they were enforced to flye to the invention of armes, without which noe victory could be obtained. Since, armes have been taken up for defence also, necessary, the mother of artes, inventing a means to withstand ambition. As *Antalcidas* was objected to *Agesilaus* being wounded by the *Thebans*, you are well rewarded for your labour, quoth hee, since you would needes teache the *Thebans* to fight, that had neither will, nor skill so to doe. For the *Thebans* being put to necessity of defence grewe warlike through many invasions of the *Lacedemonians*, saith <sup>a</sup> *Plutarch*. Whoe were the inventers of the severall pieces of armour, and of the divers kinds of weapons used in old tyme, may appeare by the relation of <sup>b</sup> *Pliny* in his natural history. This is certeyne, that the most warlike nations, and most victorious have alwayes sought to have advantage of their enemies by advantage of armes. The end of armes is either to defend, or assault. Hence are armes divided into two kinds: Defensive, and Offensive. Defensive are those, which are worn to resist the force, and charge of the enemy. Of this sort are the head-piece, gorget, curace, vambrace, gauntlets, tases, greaves, and target. For whereas there are eleven partes in man, the woundes of any of which bring with the undoubted death (as some <sup>c</sup> authors write) the braines, the two temples, the throat, the breast, the belly, the two muscles above the two elbows, the other two above the knees, & the privy members pierced with a thrust: the headpiece serveth for the defence of the braine, and temples, the gorget for the throat, the curace for the breast, the vambrace for the muscles of the armes, the tases for the privities & belly, the greaves for the muscles above the knees, and the target for further assurance of the whole body, being moveable against all strokes, and proffers of the assailants. Offensive armes are such, as men endeavour to wound, or kill withall: as stinging weapons of all kinds, arrowes, stones out of slings, or the hand, swordes,

<sup>a</sup> *Plutarch*, in *Agesilaus*.  
<sup>b</sup> *Plin.* natural  
histor. lib. 7, c. 56.

<sup>c</sup> *Paric. Paral.*  
p. 57.

swordes, pikes, partizans, javelins, and the like. <sup>a</sup> But as defence and security of a mans self is more agreeable to nature, then to hurt an enemy, so are the defensive armes preferred before the offensive, in that they bring safety to him, that beareth them, whereas the other are employed in annoying the enemy onely. The Poets sett forth their bravest and valiantest men alwayes best armed for defence. So *Achilles* in *Homer*, and *Aeneas* in *Virgil*, are armed to point with armes wrought by *Vulcan*, to the end to remaine untoucht amidst the stormes of their enemies weapons. The *Græcian* Lawgivers punished that souldier, that in fight cast away his target: not him, that lost his sword or pike. <sup>b</sup> *Plutarch* writeth, that at such time as *Eparinondas* assaulted *Sparta* (the most warlike City of Greece) there was in the City a *Spartan* named *Isadas*, who was the sonne of *Phæbidas*, hee that surpris'd the Castle of *Thebes* called *Cadmea*, and thereby stirred up the warre betwixt the *Thebans*, and *Lacedemonians*, & ruinated the principality of the *Lacedemonians* in Greece. This man being in the flower of his age, and personable, and large of lymmes, ranne forth of his howse all naked, his body annointed with oyle, without apparell or armes, except a sword in one hand, & a javelin in the other; and breaking through the throng of those, that fought on his side, came to handes with the enemy, and overthrowing some, and killing other some, continued the fight, till the enemy was repulsed, and at last returned into the City without wounde. The chief magistrate understanding hereof rewarded him with a Crowne for his valor, but yet fined him as a hundred <sup>c</sup> drachmes, for that he durst venter to fight without armes defensive, judging it a matter almost impossible, that a naked man should escape with life fighting against the armed handes of so many valiant enemies, as the *Thebans* were.

In armes was required, that they should bee strong, that they should bee fitt, that they should bee comely; strong to protect, or annoy, fitt to sette close to the body and bee manageable, comely to grace him, that beareth them. That defensive armes ought to be strong, may bee shewed by the end of armes; which is to save harmlesse against arrowes, darts, and other offensive armes of the enemy. If they faile of this end, they are of noe use; it being better to be unarmed, then carry armes, that will not defend. Without armes you have the body free, and at liberty: carrying armes, though never so light, they must bee a cumber to you, and some what hinder the motion of your body. Armes therefore ought to bee sufficient to resist the weapons of the enemy. The inconvenience of defective and weake armes is well noted by *Vegetius*. From the building of the City of *Rome*, saith hee, till the time of the Emperour *Gratian*, the foote armed their bodies with *Cataphracts*, and head-pieces. But when field exercise through negligence, and sloth was given over, armour began to growe heavy, because it was seldome put on. They made suite therefore to the Emperour first, that they might leaue of their *Cataphracts*, then their headpieces. So our souldiers encountering with the *Goths*, were oftentimes wholly defeated and slaine by the multitude of their arrowes. And a little after: so cometh it to passe, saith he, that they, whoe without armes, are exposed in the battaile to woundes, thinke not so much of fight, as of running away. Yet must wee not imagine, that those souldiers fought in their ordinary apparell onely: I incline rather to the opinion of <sup>d</sup> *Stewechius*, whom holdeth, that they tooke themselves to their military coates, called in <sup>e</sup> *Notitia* *vttraque*, *Thoracomachi*: and to their Targets; This *Thoracomachus* was a garment invented long before *Gratians* time, and worn under the armours of the souldiers, and was a kind of felt, but being noe proff against arrowes, and their targets not sufficient to cover their heads, and whole bodies from arrowes, they were obnoxious to the shotte of the *Goths*, and received those overthrowes, *Vegetius* speaketh of.

<sup>a</sup> *Plut.* in *Pelop.*

<sup>b</sup> *Phæarch.* in *Agesilaus*.

<sup>c</sup> *Drachma* hadh  
in it 6 oboles  
that is about 48  
pence sterling  
ful *Pollux* lib. 9,  
cap. 43.

<sup>d</sup> *Vegetius* lib. 1  
cap. 10.  
A *cataphract* is  
the full and full  
armour of the  
foote. Hereafter  
wee shall see  
what that armour  
is.

<sup>e</sup> *Stewechius* in  
*Vegetius* pag. 15  
e. *Notitia* vttraque  
que *Orientis*, &  
*Occidentis* in fine.

The matter whereof strong armes were made, I find to bee divers. Some were forged of Steele: as the armour of Goliath, and the head-piece of K. Saul. For it is not there sette downe, what his curace was of. Notwithstanding it is likely, it was of the same matter, of which his headpiece was made. <sup>1</sup>Whe I say these armours were of Steele, I follow therein the judgement of Tremelius and Iunius, whose so translate it: & with them also agreeeth P. tablin. For the old translation hath, that they were of brasse: I have not elsewhere read of Steele armour. And it may bee, that the old translation had an eye upon the vj. age of ancient time, wherein the matter of armes was principally of Bralic. Homer reporteth, that the armour of Diomedes was of brasse: & Pausanias, that all the Heroes (that is the ancient worthies about the time of the siege of Troy) had their armour of Brasse. <sup>2</sup>Alcaeus the Poet in describing his armory saith, the rest of his armes were of brasse, as his headpieces, his greaves, his Targets, only his Curaces were of linen. <sup>3</sup>Pausanias reporteth also so that the sword of Memnon was of brasse, & the head of the speare of Achilles, & Pisan- ders axe, & the head of Meriones his shaft. <sup>4</sup>Servius Tullius in setting the City of Rome, appointed the chiefest & richest Citizens to arme themselves with headpieces, greaves, Curace, & buckler of brasse. The targets of the Lacedamonians were of brasse also by the institution of Lycurgus. So that brasse was much used in armes in the oldest times. And where Alcaeus speaketh of his linen Curace, I find that Curaces of linen were in request also eve in those times. Homer affirmeth that Ajax Oileus had a linen Curace. <sup>5</sup>But afterward Iphicrates the Athenian held them so good, that he gave them to his souldiers to wear, in steed of their vsuall armes made of iron, & brasse. And Xenophon armeth i Abradates the K. of Suse with a linen armour, adding that it was the manner of that Countrey. And Plutarch saith, that Alex. the great, after he had gotten the victory against Darius in Cilicia, found amongst the spoile a line armour, which he afterward used in the batailles, he fought. <sup>6</sup>Patricius is so confident in the strength of a linen armour of his owne device, that he doubteth not to preferre it before well tempered iron. What his invention is, he kepeth to himself, for feare the Turk should haue intelligence of it, & so Christianity bee driven to an exigent. Almen knowe, that the temper of an iron armour may be such, as wil resist the violence of a muster shotte, and that at a neere distance, Neither is this temper the invention of our dayes. The like hath been of ancient time. <sup>7</sup>Plutarch writeth, that Demetrius besieging Rhodens, was presented with two iron armours brought out of Cyprus, either of the weight of 40. pounds. The maker of them, whose name was Zeilus, desirous to shewe their strength, & firmenesse, caused one to be set up at the distance of 26. paces, and bee shotte at with an arrowe discharged out of a Catapult. The armour hitte remayned unpierced, nothing appearing vpon it, but the raising, as it were, of a penknife. And that a Catapult is of more violence, the muster the effects thereof declared in history make plaine. Whether a linen coate be of that resistance, or not, hath not been yet tried. Nay the contrary hath been tried. For Alexander at a siege of a City of the Mallians (as I take it) was sore wounded with an Indian arrowe through an armour of linen. Whose armour I would iudge to haue bene not of the stenderest, and weakest, but of the surest kinde. Yet it is not to bee passed over that Tullius Lipsius alleageb out of Ciceros Chonates concerning an linen armour of Conradas of Monferrate: a Conradas, saith hee, fought then with out a target, and in steede of a Curace hee had on a woven weed made of flaxe, & soaked in fowre wine, well salted, and often-folded. It was so sure against outward force of strokes, being filled with wine, and salt, that it could not bee pierced with iron or Steele. This invention our age hath not bene acquainted with: whether it bee the same, that Patricius aimeth at, let experience iudge. That antiquity practised it in wooll, Pliny witnesseth, who writing of wooll and woollen garments saith: ° Of wooll wrought and pressed together by it selfe alone

alone (I think as our hatters worke felt) a garment is made; & if you worke it with vinegar, it cannot bee strooke through with a sword. This wooll so wrought, he calleth coactam; which in Caesar, as I take it, is called Subcoactum, Caesars wordes sound thus: ° Pompey, although hee had noe purpose to hinder Caesars workes with his whole army; nor yet to hazard battaile, sent notwithstanding archers and slingers, of whom hee had great flore, to convenient places; and by them many of our souldiers were wounded; & a generall feare of arrowes fell vpon them; and well nigh our whole campe made themselves coates and cafes of either felts (subcoactis) or quilts, or leather, thereby to auoide the daunger of sling weapons. But wee will leaue Patricius to his fancy, and adde an example out of Xenophon of armes used by the Chalybes, a nation inhabiting the Chaldaean Mounteines. <sup>8</sup>The Chalybe, saith hee, were the most valiant nation, that the Gracians passed through, & such as durst come to handes with them. They vled linen Curaces reaching downe to their bellies, and in steede of wings, they had roapes thick woound, and fastened together. The strength of roapes thick woound together must, noe question, bee great. Caesar confirmeth it. Amongest other defences, which his souldiers desired for assurance of a Turret against the Engines of the Marsilians, hee saith: ° They made foure stories of Cables fitting the length of the walles of the Turret, and foure foote broad, and fastened them hanging downward to the beames sticking out of the Turret on those three parts, which lay toward the enemy, which kinde of covering alone, they had in other places made triall, could bee forced or strooken through by noe misliue weapon, or Engine whatsoever. This, I haue heard, was the device of the Spaniards in 88. to defend their ships against the fury of our artillery. Whereof I may inferre, that if Cables combined together bee of such assurance against Engines, roapes thick layde and fastened together must bee a strong defence against a sword. To end with the matter, whereof armes were made, I finde likewise, that the Macrones used, in steede of Curaces, coates made of haire. And thus much of the matter of Armes.

Besides, armes should be fitt for the body, and for the strength of him, that beares them. When David was to fight against Goliath, K. Saul, seeing him without armour, caused his owne head-piece & curace to be put vpon him. David assayed to marche, but finding these armes to heavy, was faine to leaue them, and to goe against Goliath vnarmed. Saul was the tallest man of his nation, David but meane of stature, & to put armour proportioned to a large body vpon him, that is a great way lesse of members, is as much, as to deliver him bound to his enemy. Xenophon amongst other causes, why the Lacedemonian horse were beaten by the Thebans at the Leuctrian battaile, alleageb this for a maine cause: That the richest men kept & furnished out horses, & as often as musters were take, the man, that was to serue, shewed himself, & answered to his name, & receiving horse & armes, such as were given him, was so led against the enemy. They were beaten, saith Xenophon, receiving horse & armes at aduventure, not knowing, whether they were fitt for service, or not. Whether armes be to bigge or to litte, they hurt alike. To litte, they pinche the bearer, & make him not able to endure labour; because he is in paine: To great, by their flap and loof hanging about the body, they hinder the motion of those partes, that are to be employed in fight. Being fitt they differ litte from ordinary apparail, except it be in weight: which inconvenience is easily remedied by vfe, and practise. Tully writeth of the Roman souldier, that his continuall vfe of armes was such, that hee noe more retoned his target, sword, head-piece, & other armes to bee burdenuous vnto him, thā his shouldlers, armes, & hāds; & said that armes were



part of a souldiers body, being so lightly made & borne, that need requiring, they could throw down their burdens, & use their ready armes in fight, as the members of their bodies. Yet must care be had, that their weight exceed not the strength of him, that beareth them. For whe he will be able to continue long in fight, that beside the labour of fight, is charged with a burden more, then he can well bear. The proofe is plain in beasts, which how strong soever they be, faint & tire vnder to much weight. Aelian after speaking of the length of pikes, giueth this rule, that they bee noe longer then a man may well use, & wield in handling. To much length maketh them too heavy, & vnfit to be managed; whereby they rest vnprofitable to offend the enemy. In this property of fittestesse those armes & weapons are comprehended, which are of most use in the field. For as in all other artes thinges of greatest effect are alwayes preferred, so is it in warr. There is great advantage in armes, which is the cause that one kinde hath been preferred before another. *Emilius Probus* giueth a notable testimony of skill in matters of warre to *Iphicrates*, of whom he writeth thus: *Iphicrates* the Athenian invented many things in warr. Hee chaunged the armes of the foote: For whereas before they vsed great targets, short pikes, & litle swordes, he gaue them litle round targets, called *Peltae*, that they might be fitter for motions, & encounters, and doubled the fise of their pikes, & made their swordes longer. Hee likewise chaunged theire Curaces, & in stede of iron, & brasse, brought in other wrought of linen, wher by he made them nimbler at all assayes. For lessening the weight, hee brought to passe, that they as much covered the body, and yet were very light, and fite for use. Of these targets, which *Iphicrates* invented, the names of *Peltati* (Targetiers) sprong: of whom wee shall hear more in this chapter. And yet wee must not hereof conclude that *Iphicrates* chaunged all the armed foote into Targetiers; for the Athenians had still their armed, notwithstanding this invention of Targetiers; (for the *Phon* testifieth) but where as the Athenians before had noe targetiers of their owne people, (as I coniecture) *Iphicrates* brought in this kind of armour: and so of the armed, hee made some targetiers, & left the rest to the armes, they bore before: iudging it more profitable to haue both Targetiers, & Armed of their owne people, then armed alone. *Polybius* also the braue Achean Generall taught his Countrey-men in stede of longe targets & Tavelines to take around target (called *Aspis*) & a pike after the Macedonian manner; and to arme themselves with head-pieces, Curaces, & greues, and to settle themselves to a staide, and firme kind of fight, in lieu of concorsory, and peltastical encounters, and by this meanes brought the to be valiant, & braue souldiers, & victorious in their fights against their enemies. *Polybius* discoursing of the Gaulois & Spanish swordes of auncient time, saith, that the Gauls sword was so fashioned, that it serued onely to strike with, and but for one stroke: after which it so bowed both in length & breadth, that vnlesse the point were rested vpon the ground, & the blade rightened, you could not strike with it the second time. But the Spanish sword was both for thrust & stroke, having a strong point, & a stiffe & sure edge to strikewithal on either side by reason of the firmnesse of the blade. This difference the Romans elyphed, and being excellent imitators of all thinges, which were best for use (thoug they were enemies from whom they tooke them,) made choice of the Spanish swordes, & after *Annibals* time caused their foote to use noe other. *Suidas* witnesseth this: The Spaniards, saith he, in forme of swordes farre excell all other nations. For their swordes both haue a strong point, and an edge on either side, that entreth deep in striking. Which caused the Romans, to lay down their owne countrey swordes, and take the Spanish forme from them, that followed *Anniball*. The forme they took, but the goodnesse of the mettall, & exactnesse of the temper they

a Aelian cap. 12

b Aemil prob in Iphicra &amp; Diolo, lib. 1. c. 10.

c Xenoph. lib. 1. c. 10.

d Plutarch in Philo. Pelya. c. 4. in Philo. em 5. &amp; Pausanias in A. cap. 4. § 1.

e Polyb. lib. 2. c. 11. &amp; lib. 4. c. 10. &amp; lib. 6. c. 10. &amp; lib. 8. c. 10.

f Suidas in mac. lib. 1.

they could never attaine vnto. The Romans then reiected the french swordes, as of small use, & imitated the Spanish, because they were fite for service. *Xenophon* describing the nations, which followed *Craesus* against *Cyrus*, their manner of arming, and order in battaile, telleth of the Egyptians, that they were armed with targets reaching downe to their foote, with long pikes, & with swordes, which they call *Copides*, & for order, stood a hundred in depth, & bringeth in *Cyrus* deriding this manner of arming, and order, to his souldiers, saying they were a like armed, a like embattailed. For their targets, said he, are greater then is fite for action, & for fight, & being ranged a hundred deep, it is manifest, they will hinder one another in fight, except a few. *Anniball*, after his first victory against the Romans, armed his Africans (his best & most trusty souldiers) with the armour of the flaine Romans; because he found it better, then his owne; & *Pyrrius* used not onely the armour, but the Italian souldiers also: & ranged them a cohort & a Metarchy, alter natively one by another. And *Mithridates* after his experience in his first warrs with the Romans, that aswell in arming, as in manner of fight, they excelled all other nations, left the arming of his owne Countrey, & brought in the Roman sword, & target, & reduced all as scere, as hee could vnto their discipline. So then strength & fittestesse are required in armes. To them is comelinesse adioyned. The shield of *Achilles* how was it bewished with pictures & Stories by *Vulcan*: and that of *Aeneas*, coming out of the same forge, how glorious was it: To say nothing of the braue armes of *Hector*, *Agamemnon*, *Dionides*, *Glaucus*, *Turnus*, *Mezentius*, & other. Alexanders armes were very rich. He had a Sicilian Caslock gyrded vpon a double linen Curace the spoile of *Iffos*: his headpiece was of iron, shining like pure silver, the work of *Theophilus*; about his necke was an iron gorget beset with precious stones. A sword hee had of wonderful temper & lightnesse, the gift of the Citician King. Hee wore a baudricke of powder worke, then the rest of his armour, the work of the elder *Elion*, & the honour of the Rhodian City. And *Cyrus* the elder, that liued before *Alex*. time, had armes provided by his Grandfather *Astages* both very faire, & fite for his body. *Abadates* the Sufian king had his headpiece of gold, & vambraces, and bracelets about his wrists, & a purple Coate, and a plume of hyacinthine feathers. Neither did this bravery rest amongst the Princes alone. The souldiers of *Cyrus* were furnished with the same armes, that *Cyrus* himselfe bore, with scarlet coates, Curaces of brasse, brasse helmets, white plumes, swordes, & euery one a darte. They differed onely in this that their armes were guilded, *Cyrus* his armes shined, & had a reflexion, as it were, a looking glasse. And *Alexan*. hea- ring of the riche armour, the Indians bore, to make his owne souldiers equall with the in bravery, whom they exceeded in valor, caused their targets to be plated over with silver (whereof they were after called *Argyraspides*) & their horse-bittes to be made of gold, & adorned their Curaces, some with silver, other with gold, & his might seeme pompe & superfluitie in a yong King, were it not that the like was done by other the greatest Generals of auncient times: *Cesar* may serue for an example for al, whose souldiers how gallant and braue they were, *Plut.* testifieth in his life. The Romans otherwise much addicted to frugality, allowed yet liberally ornaments to the honouring of worthy souldiers, rewarding them for their service, with rich trappings for horses, chaines of gold, bracelets, crownes of gold & other honors: which they were not onely in the field, but at al other solemnities & meetings in the City. And for euery common souldier they provided plumes of purple, or blacke feathers, euery one of a cubit long. Of which plumes *Polybius* giueth this indgement: Plumes, saith hee, being added to the rest of the armour maketh a souldier seeme twice as great, as hee is; and beside the faire shewe, they make, they are terrible to the enemy in fight. A man may seeme as light, as a feather, that discourseth of plumes, & fetcheth ornament from feathers.

a Xenoph. Cyt. lib. 6. c. 10. b Copides were swordes a litle bending at the point, like fishes. Curt. lib. 8. c. 17.

c Polyb. lib. 17. c. 10. d Plutarch in La. c. 10.

e Plutarch in Alex. c. 10. f Plutarch in Alex. c. 10. g Plutarch in Alex. c. 10.

h Xenoph. Cyrop. lib. 1. c. 10. i Xenoph. Cyrop. lib. 1. c. 10.

k Xenoph. Cyrop. lib. 1. c. 10.

l Xenoph. lib. 8. c. 10.

m Plutarch in Caesar.

n Plinius hist. nat. lib. 9. cap. 28. Polyb. lib. 4. c. 10.

It may I truly affirme, that the use of plumes is very ancient, & that the Romans borrowed it from the Gracians, and the Gracians from the Carians, who were the first inventors of them. As much is testified by <sup>a</sup> Polyenus: He saith that Temenches K. of Egypt going to the oracle of Ammon about the state of his kingdome, had answer to beware & take heed of Cocks. P<sup>r</sup>ammetichus, that fought the kingdom, had P<sup>r</sup>igetes a Carian to one of his familiar friends & learning of him, that the Carians were the first that invented Plumes to their helmets, & evē then continued the use of them, & concluding that the meaning of the Oracle was not of Cocks, but of men, that wearing some ornament on their heads, had a resemblance of Cocks, waged a multitude of Carians against Temenches, by whose help he overthrew Temenches in battaile, & possessed himself of the crown of Egypt. Now for the true end of souldiers ornaments I wil onely adde one example. Philopomen the Achaean in reforming the abuses crept into the Achaean State with great iudgement (I will use the wordes of <sup>c</sup> Plutarch,) reduced to order their delicacies & superfluities. It was not possible quite to take away the sickness of vain & idle desires, wherewith they had of long time been possessed, delighting in excess of apparail, in riche dyes of coverlets, & carpets, striving one with another, whoe should be most sumptuous in bankets & feasting. But by litle & litle beginning to turne their thoughts from vnecessary expences to a loue of comelinesse in things, that were profitable & honest, he brought them at last to leaue the expences of the body, & to shew themselves gallant, & braue, in soldiery, & warlike furniture. A mā might therefore haue seene the shoppes full of silver and golden cuppes cutte a pieces, of curaces gilded with gold, of silvered targets, and bittes; the places of exercise fraught with colts then first backed for service, & with yong gallants managing their armes; & in the hands of women head-pieces adorned with divers-coloured trymmings, horsemen coates, and souldiers cloakes curiously embellished with flowers. For the very sight of these things both encreaseth Spirit, & stirreth vp desire, & engendreth an vndaunted boldnesse, and alacrity to daungers. In other shewes to much lavishing bringeth in effeminateenesse, & worketh a remissenesse of minde, the fence with vaine pleasings and ticklings subverting, as it were, the vigor and force of the vnderstanding. But in these the Spirits are much heighened, and exalted. As Homer bringeth in Achilles at the very sight of his newe armour ravished and inflamed with a desire to bee doing with it. Thus garnishing the youth hee exercised & hardened them to labour and warlike motions, making them thereby to vndergoe with desire whatsoever they were commaunded. So farre Plutarch. Out of whose opinion is followeth, that Bravery of armes raiseth the spirits, stirreth up desire to fight, maketh the souldier bold, and cherefull to perills, and as Polybius holdeth pleaseth the sight, encreaseth stature in shewe, and is a terror to the enemy. It ought there therein a meane to be sought, & rather an assurance followed, then vaine gazing and ostentation. Antiochus being to fight with the Romans gathered a mighty army together. And seeing them glitter with gold and silver, and with all excess of bravery, as the manner of the Asiaticall people was, tooke so great delight therein himself, that calling Anniball unto him, he shewed his troopes, and demanded, if hee thought not that Army sufficient for the Romans: yes quoth Anniball, though they were the most covetous people in the world. Anniball with good reason derided the vaine shewe fitter for a mask, then a field, which hee assured himselfe, would fall into the Romans hands to bee spoiled. Atithridates committed the like error in his first warre against the Romans. For, as Sophisters are wont for the most parte, saith <sup>d</sup> Plutarch, hee was in the beginning vaine glorious, and conceited by powde warning against the Romans with weak forces, but yet sette out with pompe, and bravery

<sup>a</sup> Plutarch in Lucullo.

<sup>c</sup> Plin in Philop. Polyb. li. 11. 629.

<sup>a</sup> Herod. li. 1. 14  
<sup>b</sup> Polyen. li. 7 in Plutarch. § 1.

bravery to the outward view: But being foiled to his shame, and weighing in his minde, he must take vp second armes against them, he sought to reduce his forces to a true kinde of arming, & fitt for the service, he intended. Rectifying therefore multitudes, and confuted threatnings of barbarians, and furnitures of armes gilded, and sette with precious stones, as being a pray for the conqueror, and noe assurance for him, that wears them, hee brought in the Roman swords, and caused long heavy targets to bee framed, and chose horses, rather that were already managed, and made fitt for service, then those, that were richly traped and garnished. So farre Plutarch. The souldiers care there fore ought to bee first for surenesse, then for fittnesse, lastly for comelinesse and ornament in armes. If the two first fail, the last availeth litle, and will prone rather a burden, then a defence. And thus much of armes in generall: Nowe followe the particulars of armes, as they are in Ælian.

1 Preparacions absolutely necessary for warre] The preparacions, whereof Ælian speaketh, are so necessary, that without them noe warre can be made or continued. For purposing to fight by water you must have shippes, by land, you must have foote, and horse. For which, if you provide noe armes, you put them into the field not to fight, but to bee slaughtered. The manner of fight in the field is not of one sort. Some time celerity is needfull, to attempt or prevent the enemy: sometime a slowe and sure proceeding, left, with to much hast, wee be overtaken our selues. Therefore the divers arming of souldiers, ought to be such, that they may serue for all occasions, and uses, and that wee may employ alwayes to service such, as by reason of their armour, shall most fitt our purpose. Wherefore <sup>a</sup> Iphicrates firstly resembled an army to a mans body: calling the heavy-armed the body, the light-armed the hands, the horse the feete, and the Generall the head: and as, if any of the rest were wanting, the army should bee lame, and halt: so if there want a Generall, it is unprofitable, and of noe use. The heavy-armed are the body, which give life and foode, as it were, to the rest: and to which the rest being distressed, retire. The light-armed are the hands, which vpon every occasion being put out to grype and take hold vpon the enemy, are drawn in againe, when it is expedient. The horse, as feet, move with celerity: the Generall is the head, that ruleth, that watcheth, that careth for the rest, directing the times of their motion, and of their rest. So then the whole force of the field consisteth of horse, and foote. And the foote are reparsed into three kinds.

1. Armed, Targetiers and light-armed] These severall kinds of souldiers were of all the Gracians, especially by the <sup>b</sup> Athenians, Lacedæmonians, and Thebans, whoe were the mightiest, and the most warlike people of Greece. Alexander had them in his army against Darius. <sup>c</sup> When Alexander, saith Arrian, came to the place, where Cyrus (with whom Xenophon was) encamped, and sawe the streights of Cilicia possessed with a strong garrd, hee left Parmenio with the heavy-armed, to stay behind, himselfe about the first watch taking with him the Hypaspistes, archiers, and Agrians, marched on toward the streights in the night. The armed were left with Parmenio, himselfe tooke with him the Hypaspistes (targetiers) archiers, and Agrians: <sup>d</sup> These Agrians were darters on foote. The like is to be found in divers other places of Arrian. <sup>e</sup> Pyrrhus also, that followed the Macedonian manner in arming his souldiers, had the same division of armes. <sup>f</sup> And Philip King of Macedony sonne of Demetrius. <sup>g</sup> And Antiochus, that warred against the Romans.

2 The armed beare the heaviest furniture] This heavy furniture appeareth not by description of the armes, which Ælian giveth them: which are a Macedonian target,

<sup>a</sup> Plutarch in Per. Iphicrates. I. in Iphicrates § 12. Loco cit. 205 § 129.

<sup>b</sup> Theocrit. lib. 3. 15. B. C.

<sup>c</sup> Arrian. li. 3. 21.

<sup>d</sup> Arrian. li. 1. 14.

<sup>e</sup> Plutarch. in Pyrrho.

<sup>f</sup> Polyb. li. 4. 335.

<sup>g</sup> Appian in Syriac 107. D.

target, and a pike only. Iphicrates, besides the target (lesse, then the Macedonian target) which he armed his Targetier with ball, gave him both a pike & a linen curace: So that if the Macedonian armed bore noe more then a Target and a pike, his armes should be lighter, then Iphicrates his Targetier, who had a target, a pike, & a linen Curace. It hath bene the manner of some Nations to beare targets alone without Curaces. So did the

Egyptians in Xenophon: So the Gauls in Pausanias: There are againe, that have borne Curaces without Targets: as Phorcys the Phrygian in Homer: of which kinde of Curace, because it some what resembleth the Curaces of our time, I will reherse the description out of Pausanias. There lay vpon the aulter, a brasse Curace, the forme whereof agreeth not with the vse of our times, but of old it was common. It had two plates of brasse, one fitte for the brest and the belly, the other to cover the backe. That before, was called *gyalon* (the hollow part) that behynd *Prosegon* (because it was added to the other.) They were fastened together with buttons behinde. It seemeth to bee a sufficient defence for a mans body without a Target. Therefore Homer maketh Phorcys the Phrygian to fight without a target, because he wore such a Curace. But yet, that it was not the manner of

the Macedonian armed to beare pike & target alone, may be plaine many wayes. First Polyen giueth them headpieces, & greues, and targets, and pikes. Then doubt I not but they were as well armed as the rest of the Gracians, within whose Panoplia Curaces were comprehended as S. Paule testifieth rekonig as parcels of the Panoplia, a Curace, a target, & a headpiece. Now that the Macedonians had also their Panoplia (full or complete arming) is to be found in Diod. Siculus. Where also Choraugus the Macedonian (whom Curtius calleth Horatus) is said in the fight betwixt him & Dioxippus to be fully armed. Leo describeth the Panoplia of the Macedonians after this manner. Alexander, saith hee, armed his Macedonians with a large target, a sword, a head-piece, greues, vambraces, and a long pike. Philopamen (as is before reherfed) reducing his Achaeans to the Macedonian arming, bringeth them to Curaces, headpieces & greues. The names also, that are attributed to the Armed, then they were otherwise armed. Plutarch calleth them *Pephragmenos*, & *Catapraectos*, as having their bodies all armed & opposeth them to *Enzon* (lights, or naked:) And by Vegetius, the armour it self is named *Catapraectus*, because the whole body is covered therewith. Xenophon termeth them *Thoracophoros* bea- ring Curaces.) These are the strength of the battaile, and a strong wall, or rather a fortresse of the field, to whom the light-armed, and the horse also retire in time of need. As long as they stand, the field is not lost, being defeated, the rest can make noe resistance. Being armed with a single target without other armes, they incur the same daunger, that the Romans in Graians time did, whose for want of Curaces were entirely destroyed with the arrows of the Gothes. Wherefore, it seemeth, Alian heer pointeth at the principall armes onely of the armed Macedonian. For after ward discoursing of the light-armed, he saith, they neither had Curace, nor greue, nor long or round target: implieng thereby, that the armed had them all.

So Livy, comparing the armes of the Romans and Macedonians together, saith noe more, then, that the Macedonians were armed with a round target and a pike, the Romans with a long target, and a dart, called *Pilum*; when himself had before declared, they had headpieces, Curaces, and greues.

3 Vling targets after the Macedonian manner [Targets were of two sortes, round targets, and long targets. Long targets were called *Thureo*, and were in forme like a doore, from whence they had their name. For *Thura* significth a doore. These the Romans, and Gauls vsed, albeit some what different in forme. The round had eight full handfulls in diameter, as Alian saith, and were termed *Aspides*. Long targets were much disliked by the Gracians. Cyrus in Xenophon derideth them,

as both hindring the sight, & being unwieldy: and Philopamen changed them into round targets, following the Macedonian manner. The targets of Philopamen Pausanias termeth Argolican targets: It may be because they were first vsed by the Argives in the battaile betwixt Acrisius Danates father, and Peratus, who contended about the kingdom of Argos.

Of what matter these targets were, is a question. Some take them to have been made of other matter; & covered over with brasse: & that otherwise the souldier should not have been able to beare born them for the weight. I deny not, that in ancient time some targets were plated with brasse: the rather, because I find, that Alexander to match the Indian pompe covered the targets of his souldiers with plates of silver. But, that the ordinary Macedonian target was so covered, I deny. Alian after calleth them chalice (brasse) not epichalce (covered with brasse). Polyb. saith, that the Macedonians in the time of K. Philip the sonne of Demetrius were called Chalcapides (Brasse targetiers) not epichalkitai, by which name, as Hefychius bath, they were called, that had their targets covered with brasse. So like wise in the time of Perses. And the Megapolitians, whose imitated the Macedonian manner of arming, are termed Chalcapides in Polybius: I haue shewed, that the Lacedemonians had brasse targets by the institution of Lysurgus: & that in the time of the Heroes almost all armour was made of brasse. The targets of the Lacedemonians that were stime as the battaile of Leuctra were brasse, and so bee scene in the time of Pausanias; and the brasse target of Pyrrhus, which he left at Argos, being there slaine, was kept in the temple of Ceres. As for the weight, it is not so great but it may become light enough by vse, and exercise. Wee see iron targets in vse at this day, and not hard to be borne. And albeit the weight bee not for every mans strength, yet since it hath bene, and is, the manner to make choise of souldiers, and to fitt them with armes according to the ability of their bodies, I see noe reason, but the stronger fort might well beare them. Another sort of targets there was which differed from the Macedonian not so much in forme of roundnesse, as in matter, and manner of carieng. They were made of wicker, and borne in the left hand as our bucklers, which wee used not long since, and some covered over with hides, some not.

Xenophon saith, that Cyrus the elder armed the Persians with these wicker targets: & rekonig up the nations, through whose Countries the Gracians passed in their returne out of Persia, & describing their armes, reporteth that the Chalybes, Taechi, & Phasians had targets of this kinde. Now, that they were borne in the left hand, is clear by the same Xenophon. He writeth thus of the fight betwixt Cyrus & Crassus: The Egyptians & Persians encountering together, the fight was hard, & sharpe: & the Egyptians aswell in number as in armes, had the advantage. For they fought with stiffe, long pikes, & their large targets better covered their bodies, then Curaces, or wicker targets, and being borne on their shoulders availed to joint thrusting forward. Serring therefore their targets close, they advanced, & ranne on. The Persians were not able to endure the shock, by reason they bore their wicker targets at the armes end, but retiring by litle, & litle, & giving, & taking blowes, they maintained the fight till they came to the Engins. So farre Xenophon. Out of which words a man may plainly understand the manner of beaaring these wicker targets, which by reason of lightnesse might easily bee held out at armes end. And as the Egyptian targets, which reached downe to the foote, must needs bee heavy, and therefore had need of the shoulder to support it, so was it with the brasse targets of the Macedonians, which were also weighty, by reason of the matter, they were made of. These therefore were like wise caried on the shoulder. Plutarch witnesseth it in the life of Amilius. And the same Plutarch reherseth that Cleomenes the King of Sparta taught his Lacedemonians, in steede of a speare, to vse a pike with both bandes, and so beaare their targets

\* Aemilius Pro-  
b in vita I. lib.  
ciat

\* Xenoph. Cyr.  
lib 7. 128 B  
b in vita I. lib.  
ciat 648

c Pausan. in Pho  
dic 660

Gya. othorax.

d Polyen. li. 4. in  
Philipp. § 10

e Ad Ephes. cap  
6 v. 14

f Diod. Sicul. lib  
17. 619 & 615

g Leo. cap. 6 §  
35 & 35 37

h Plut. in Timol.

i Veget. l. 1. ca. 20  
k Xenoph. Cyr.  
1. 67 C

l Veget. li. 1. cap  
20

m Diod. Sicul. lib  
18

n Livy lib 9. 24  
C

o Livy lib 1. 27  
C

p cap 13

\* Polyen. li. 4. in  
Philop. § 1 &  
Plut. in Philop.  
b in vita I. lib.  
ciat 471.  
c Pausan. in Co-  
rinthiac. 111 &  
Plut. in vita I. 2  
129 16

d cap 12  
e Polyb. l. 1. § 10  
f h & lib. 4. 131 A  
g 131 C

h Plut. in Aemiliu  
l. 1. § 10  
i Polyb. l. 4. § 10  
k 333 D lib. 4  
l Xenoph. de rep.  
laced. 618 B  
m Pausan. in Bana-  
ciis 568

n Pausan. in Ce-  
sith. 123

i Xenoph. de Xp.  
Cyr. 354. u  
m Xenoph. Cyr.  
lib. 4. § 10

n Xenoph. de Xp.  
Cyr. lib. 4. § 10

o Xenoph. Cyr.  
lib. 7. 177 B

h Xenophon de  
exc. ed. Cyr lib. 4  
p. 116.

a Suidas in Ocha  
no.  
b Hefychius in  
Ochano  
c Hefychius in  
Porpax.

d Suidas in Por  
pax.

e Hierodotus li.  
1. p. 14  
f Paulus in RE  
act. 140

g Plutarch in vi  
ta Cleomenis

h Xenophon de  
exc. ed. Cyr lib. 4  
p. 116.

k Plat. in Philo.

l Xenophon de  
Cyr.

targets upon the strappe not by the handle. The wordes are obscure, & need light, which I will give as shortly as I can. I find three wordes amongst the Grecians, all pertaining to a target. They are those Telamon, ochane, or ochanon, and porpax. Telamon in this sense (for it signifieth otherwise a band) is by all confessed to bee the broad strappe, which is fastened to the handle of the target, & holdeth the target being cast about the necke, unto the back of Ochane, & porpax is some variance. <sup>a</sup> Suidas saith that Ochanon is ὁ ἀντιπικρὸς ἄνδρῶν. The hold of the target <sup>b</sup> Hefychius calleth it the Porpax of the target, & the band. <sup>c</sup> Of Porpax Hefychius saith it is the handle of the target, & taketh Porpe in the same sense, making it the thing bearing vp the targett into which the hand and arme to the elbow is thrust. <sup>d</sup> Suidas saith, Porpax is it, that they hold the target by, which is called ochanes: & againe, that some take it for the band of the target; other some for the middel iron that goeth through the target, on which the fouldier taketh hold. So that both Hefychius, & Suidas agree, that Ochanon & Porpax are sometime alone, and signify the handle of the Target, in which sense Hierodotus & <sup>e</sup> Paulus take Ochanon also. Hefychius further interpreteth it for the band of the target (<sup>f</sup> & <sup>g</sup> Plutarch) which signification better agreeth with the meaning of Plutarch, who maketh an apparant difference betwixt the, reporting that Cleomenes taught the Lacedemonians to carry their targets, by the Ochane, not by the Porpax. When he saith by the Ochane, hee meaneth by the strappe, by which, being fastened about the necke, the target is throwne over to the back, & resteth upon the left shoulder. That, which I say, will better appeare, if we marke, what the Lacedemonians did before, & what Cleomenes advised them unto. Before they carried a speare in the right hand, and a target by the handle in the left, so that both their hands were full. The speare was not able to match the enemies pike (for Cleomenes had often to doe with the Macedonians & Achaeans, whose both used pikes) & pikes, the Lacedemonians could not wield, with one hand. So then, to give them liberty of both hands, he counseled the to carry their targets at their backs by the strappe or Ochane (which was the Macedonian manner) and not to hold them any more by the Porpax or handle, and so free their left hand, to apply both to the menaging of a pike. This I take to be the direct meaning of Plutarch: Cleomenes then perswaded them to leave their speares, & take pikes. And lest the target in the left hand might proue an impediment to the use of a pike, hee thought best they should carry them at their backs by the Ochane. To carry them then by the strappe at the backe is to give free use to the left hand, without which a pike, specially a long pike, such as Cleomenes advised them unto, cannot be wielded: as experience will teach any man, that list to make triall.

4 And long pikes.] Pikes for the most parte have beene called by two names by the Grecians; Doru, and Sarissa. <sup>h</sup> Alian nameth them Dorata both heere, and in other places of this book. <sup>i</sup> Xenophon, speaking of the weapons of the Chalybes, saith they had Dorata of 15. cubits long; armed with iron at one end onely. Yet is Doru taken for a speare oftentimes, as in that place of <sup>j</sup> Plutarch last recited where Cleomenes perswaded the Lacedemonians to chaunge their Dorata (speares) into Sarissas (pikes.) The like recounteth hee of <sup>k</sup> Philopamen, whoe chaunged the speares of the Achaeans into pikes, calling the speares, Dorata, the pikes, Sarissas. And even in this place Alian termeth them not Dorata simply, but with addition of Perimekestera, of along sse. And after describing the armes of the Pelastres hee saith their speares (Dorata) were much shorter then the pikes (Sarissas) of the armed. Properly the pike of the Macedonian is termed Sarissa, if sometime Doru, some other word is added to avoide the ordinary signification of Doru; as Doru macron <sup>l</sup> in Xenophon, Doru perimekes in Alian. Yet deny I not, but it may be called Doru of the matter. For Doru signifieth wood of any kinde: and

by

by consequent the wood, a pike is made of. But, as I said, the Macedonian pike is properly called Sarissa. What the length of this pike was, Alian will shew in the 14. Chapter. And for the wood it was made of, I take it to have beene Cornel. For I finde that the Macedonian horsemans staffe was of that wood. <sup>a</sup> Arrian confirmeth it, saying: And now the Macedonians had the better both by reason of the strength of their bodies, and experience in warre, and also because they fought with Cornel lances against Iavelins. For I assent not to the translator of Arrian whoe turneth Xystois Craneinois into Cornel darts, where it should be Cornel lances. For in that place Alexander is reported to have fought with a lance, and to have broken it in fight, and to have asked another of Aretes, one of the Quiries of his stable, whoe had also broke his, and fought with the truncheon, and to have taken the lance of Diuvarates the Corinthian, and returned presently to the fight, and therewith overthrowne Mithridates the sonne in lawe of Darius. Besides it is said, that the Macedonians had the advantage in weapons; Take it thus, that they fought with darts against Iavelins, what advantage had they especially being come to the shock: Darts are used a surer of. At hand noe man fighteth with them, vntlesse hee haue noe other weapon. I thinke noe man will deny, but that a Iavelin in closing is more advantageous then a dart. And that Xyston signifieth a lance, Alian himselfe testifieth in this Chapter calling the lanciers Doratophori, or Xystophori. The Macedonian then had his horsemans staffe of Cornel. Which Pliny affirmeth to be a sound and a fast wood. <sup>b</sup> If his lance: a man may probably coniecture, his pike also, which exceeded the lance in length and thickeesse onely. Wee at this day preferre the Ash before all woods for toughnesse, lightnesse and beautie; especially if the vaine runne through to the end. Notwithstanding I finde in Cicuta a knight of Venice, an old souldier, and one that followed the Emperour Charles the fift in his warres of Africk, that the opinion of his time enclined rather to Firre both for lightnesse, and strength. I have not scene the experience: therefore leaue I the iudgement to triall. Wee haue then out of Alian that the armed had both target and pike, that one man should at one time use both target, and a pike in fight, against the enemy will seeme incredible in our dayes. Yet used the Macedonian souldiers both; at one instant they both charged their pikes, and covered themselves with their targets against the flying weapons of the enemy. The manner was this: when they closed with the enemy, they charged their pikes with both hands, and with a slight wryeng of the body, and lifting up the right shoulder, whirled their target, hanging at their backe, upon the left shoulder, that stood next the enemy in the charge: and so covered all their body to the middle, and beneath. I haue touched it in the practise of Cleomenes. It appeareth more plainly in Plutarch, describing the battaile betwixt K. Perseus, and the Consul Aemilius. Hee hath this: <sup>c</sup> The enemy approaching Aemilius issued out of his Campe, and fownd the legionary Macedonians, bearing nowe the heades of their pikes stiffe vpon the targets of the Romans, not suffering them to come vp to the fword: which when hee sawe, and sawe with all the other Macedonians casting about their targets from behinde their shoulders, and receiving the Roman targetiers with their pikes abased together at one signal, and likewise the firmenesse of the battaile shutte vp, & ferred, & the roughnesse of the front (the pikes lyeng out before) he became astonied, & affrighted, as having never before beheld so fearefull a sight. Which passion, & spectacle, hee afterward oftentimes recounted to his familiar friends. This joyning of targets in the front is called Synapsifimos: whereof wee shall haue occasion to speake heere after.

<sup>a</sup> Arrian, lib. 15.

<sup>b</sup> Pliny natur. hist. lib. 16. cap. 40.

<sup>c</sup> Aured, Cicuta de diatrophia mil. lib. 15. p. 112.

<sup>d</sup> Plutarch in Aemilio.

5 The light. ] They had divers names given them in the Greek history. Sometimes they are called<sup>a</sup> Euzoni, because they so girded up their apparell about the, that they were light and fit for motion : Sometimes<sup>b</sup> Askeuoi, because they beare no military furniture of defence : Sometimes<sup>c</sup> Elaphroi because they resemble (as some think) a hart in lightnesse, and swiftnesse : Sometimes<sup>d</sup> Gynnetæ (naked) because they were without defensiv armes : Sometimes Pfyloi (naked or light) as they are here termed by Ælian and by Appian, and the other, that I cited.

6 Flyeng weapons onely ] The light-armed are divided into three kindes, Archers, Darters, and Slingers. Which three kindes were of much use amongst the Gracians, and they beare onely sling weapons. Xenophon testifieth that Cyrus the elder had them : And the Gracians in their returne out of Persia : Alexander had them in his warre against Darius : and Pyrrhus in his warre in Italy, Sicill and Greece : The Gracians against Brennus King of the Gauls : Both the Athenians & Thebans at the battaile of Delos.

7 Arrowes ] Archers have always bene of speciall esteeme for the field, and preferred before the other kindes of light-armed. Many nations have bene commended for their skill in shooting. Emongest the Gracians the Creans were (of ancient time) sole archers, as Pausanias witnesseth. Yet was not their service aequall with the service of the Persians. For Xenophon confesseth, that the Persian bowe overreached the Crean a great way : and that the Rhodians with their sling ow shrew the Crean bow. Of the Cardichans a people, through whose Countrey the Gracians passed at their returne out of Persia Xenophon writeth thus : They carried noe other armes, then bowes and slinges. They were excellent archers ; and had bowes well nigh three cubits long ; arrowes more, then two Cubits. When they shotte, they drew the string, applieng their hand some what toward the neither end of the bowe, setting their left foote forward. With their arrowes they pierced both targets, and Curates. The Gracians putting thonges to the middle of their arrowes sent them back at the enemy in steede of Dartes. The

same in effect is reported by Diodorus Siculus. Of the Parthian horsemen, Appian saith : When Crassus commaunded the light-armed to disband, & goe to the charge they went not farre, but meeting with many arrowes, and being fore galled with them, they retired freight, and hid themselves emongest the armed, and gaue beginning of disorder, and feare, representing to the sight of the rest, the force, and violence of the shotte, that rentall armes, they fell vpon, and made way aswell thorough bodies, that had the best, as the worst furniture defensiv : giving mighty and violent strokes from stiffe and great bowes, and forcing out the arrowe boisterously with the compasse, and bent of the bowe. Plutarch hath the very wordes, that are in Appian. The Indians also were good archers, albeit not much praised by Q. Curtius. Hee saith: their arrowes were two Cubits long, which they deliver out of their bowes, with more labour, then effect : for as much as the arrow, whose whole efficacy is in lightnesse, becometh altogether vnwieldy by reason of the weight. And yet hee saith, that Alexander, at the assault of the principall City of the Mallians, was strooke thorough his Curace into the side beneath the pappes with an Indian arrowe : with whome Plutarch and Diod. Siculus accord. Arrian addeth the wound was so deep, that his breath was sene to issue out together with his blood. The Gothes and other people of the north, that invaded the Roman empire, had their chiefe victories against the Romans by the help of bowes, and arrowes. Vegetius (before alleaged) speaketh plainly : So our fouldiers, saith hee, vnarmed

both

both bodies and heads, encountering with the Gothes, were oftentimes wholly defeated, and flaine, with the multitude of their arrowes. I may not pretermite the praise of our nation in this skill. Our owne stories testify, that the great battailes, we gayned against the french, were gayned by the joint shooting of our archers principally. And that the English have heretofore excelled in archery & shooting, is cleere by the testimony even of Sirangers : Cicuta (whom I named before) commending the use of bows, as necessary for the service of the field (& that long after gunnes were invented) preferreth the English before all other, and setteth him downe, as a patterne for other to follow. And Patritius, disputing of the violence of arrows, doubteth not to affirme, that an English arrowe with a little waxe put vpon the point of the head, will passe through any ordinary Corsette or Curace. Howsoever the credit of bowes is lost, at this present, with many great souldiers, yet have they of ancient time been highly prized. Vegetius saith, how great advantage good archers bring in fight, both Cato in his booke of military discipline doth shewe evidently, and Claudius, by augmenting the number of archers, and teaching of them the use of their bowes, overcame the enemy, whome before hee was not able to matche. Scipio Africanus (the younger) being to giue battaile to the Numantines, that before had forced a Roman army to passe vnder the yoke, I thought hee could not otherwise haue the better, vnlesse hee mingled chosen archers in eury Century. And Leo the Emperour in his Constitutions military hath this Constitution emongest other : You shall commaund all the Roman youth, till they come to fourty yeares of age, whether they have meane skill in shooting, or not, to carry bowes & quivers of arrowes. For since the art of shooting hath been neglected, many, & great losses haue befallen the Romans. And in another place : You shall enioyne the Commanders vnder you, in winter to take a viiij, and to signify to the Turmarshes (Colonells) how many horse, & what kinde of armes the souldiers, vnder their commaundes, stand in need of, that necessary provision bee made, & the souldiers be furnished in time convenient. But specially you are to haue care of archers ; & that they, whose remaine at home, & haue vacation from warre, hold bowes and arrowes in their howses. For carelesnesse heerein hath brought great damage to the Roman State.

So Leo. This of old time was the opinion of the Romans concerning archers. Howe we are fallen out with them in our dayes (the skill of the bowe, being a quality so commendable, and so proper to our nation) I knowe not, vnlesse fire-weapons perhaps haue put them out of countenance. And surely it may not bee denied, that the force of fireweapons of our time doth farre exceed the height of all old inventions for any one enemy. And, when I haue given them the first place, I will not doubt to giue the second to bowes and arrowes : being so farr from casting them off, that I would rather follow the wisdom of the Gracians ; whose albeit they esteemed arrowes the best sling weapons, yet thought it not amisse to hold in use slinges, and dartes. Every weapon hath its property ; and that which is fitte for one service, is not so fitte for another. The fire-weapons haue their advantages ; they haue also their disadvantages. Their advantage is, they pierce all defence of armour, and lighting vpon a place of the body, the wound whereof endangereth life, they bring with them certaine death. Their disadvantages are, they are not alwayes certaine, sometimes for want of charging, sometimes through overcharging, sometimes the bullet rolling out, sometimes for want of good powder, or of dryed powder, sometimes because of an ill dried matche, not fitte to conle, or not well cocked. Besides they are somewhat long in charging, while the musketer takes downe his musket, vncockes the matche, blowes, proyns, shutes, casts of the pan, casts

C



a Curt lib 9. 40.  
b Curt lib 9. 40.  
A. D. N. 1. 2.  
lib 1. 61. C

Polyb. lib. 6. 40. E

c Xenoph. de ex-  
ped. Cyri. lib. 5.  
92. D. & Diod  
saml. lib. 24. 411

d Xenoph. de ex-  
ped. Cyri. lib. 5.  
97. 4.

e Xenoph. H. H.  
grac lib 5. 519

f Xenoph. de ex-  
ped. Cyri. lib. 5.  
100. 8

first the *Agrians* (Lanceant *saith Curtius*) at *Dioxippus*, when hee thought him with in his reach. But the darters, here spoken of, are of the light-armed. Such were the *Agrians* in *Alexanders Campe*, who in all attempts of speed were employed by *Alexander*, and served to purpose by reason of their lightnesse. The darte of the *Gracian* was a slender shaven piece of wood, about three foote long, armed at one end with a head of iron with a sharpe point, to the end to pierce, whatsoever it should fall vpon. For the length, I gine, it differeth not from the Roman darte in *Polybius*: and *Xenophon* seemeth to asseme it, when speaking of the arrowes of the *Carduchians*, the faith they were longer, then two cubits, & addeth, the *Gracians* sent them backe againe at the enemy in steede of Darts. About the middelt of these dartes they fastened a thong, which was called *apxwov*, wherein, inserting their forefinger, they launced the darte with more facility. *Xenophon* witnesseth it in the same place, and in another place hee saith, *Xenophon* commuanded the targetiers to marche with their fingers in the thonges of their dartes, the archers with their arrowes nooked, the slingers with their sery pps full of stones, that they might be redy to let fly, when they were commuanded. These dartes were for cible enough to pierce armoures of that time, and that with them alone *iphicrates* overthrow and destroyed a whole No<sup>r</sup> of the *Lacedaemonians*, which people were accounted the best armed, and the most valiant of the *Greekes* before the *Macedonians* came in credit.

9 Stones.] There are here mentioned two manner of throwing stones, the one with the sling, the other with hand alone. The stones, thrown with the sling, fly with much more violence, then the stones throwne with the hand: and, being cast with a skillfull and strong arm, they reache a greater way, then a man would thinke. And yet not so farre, as bullets throwne out of a sling, which by *Xenophons* report outreached the *Persian* arrowes. I have before touched the story: I will now lay downe *Xenophons* wordes. The *Gracians* (those ten thousand, that returned out of *Persia* vnder the leading of *Cherisophus*, & *Xenophon*) had not marched farre, before *Mithridates* appeared againe with 200. horse, and 400. Archers, & slingers, which were very nimble & light. Hee came close vp to the *Gracians* as a friend. Being neer, some of his horse, & foote began to shoote, other to sling, & to wound the *Gracians*. The reare Commanders of the *Gracians* were hardly bested. Yet could they doe nothing to anoy the enemy. For the *Cretans* shoote not so farre, as the *Persians*, & carrying noe armour of defence, they were faine to hide themselves with in the body of the armed; & the Darters were not able to reache the slingers of the enemy. *Xenophon* therefore having the rear, thought good to charge and follow the enemy. But hee was not able to overtake them, (for the *Gracians* had noe horse) & the *Barbarian* horsemen, shooting backward in their flight, wounded many of them, that gaue the chase. To remedy this inconvenience *Xenophons* advice was to provide horse as many, as they could. And hearing, that there were many *Rhodians* in the *Campe*, skillfull in slinging, whose slings reached twice as farre, as the *Persian* sling (for the *Persians* vsed stones, that filled the hand, the *Rhodians* leaden bullets) hee likewise aduised to armethem with slings, and vse their service. The next day the *Gracians* furnished out 50. horse, & 200. slingers. And when *Mithridates* shewed himselfe againe with a thousand horse, & foure thousand archers, & slingers, and came vp to charge, both the *Rhodian* bullets light amongst his troupes, and the 50. horse issuing forth fell vpon the enemy and put him to flight, and slew many of the foote in the chase, and tooke eightene horse. Wee may heer ndre two kind of slinges one with the stone, the other with the bullet: and besides, that the *Rhodian* sling with the bullet over-reached, both *Cretan*, and *Persian* bow: which was yet afterward more

more plainly declared, when *Tissaphernes* charging the *Gracians* with his *Persian* archers, the *Rhodian* slinges so terrified him, that both himselfe, and his troopes with drew. And albeit hee followed a farre off, yet durst hee noe more approach, but suffered them quietly to marche all that day, and many other afterward. In this arte of slinging, although many nations laboured, yet were there very fewe, that excelled. The Bible maketh mention of seven hundred *Gybeonites*, whose skill was excellent in slinging. Of other nations none might compare with the *Baleares*: of whom *Diodorus Siculus* writeth thus: Their armor is three slinges, whereof they haue one about their heades, another about their waste, the third in their hand. In warre they cast greater stones, then any other, and with such force, that they may seeme to bee sent out of a Catapult. Therefore in sieges and assaults of Cities they wound the defendants of the walles, and in the field breake targets, and head-pieces, and all defenseiue armes. They ayme so certainly at any marke, that they seldom fail in hitting. The cause is their continuall practise from their childehode, their mothers continually enforcing them to sling, even when they are yet children. For setting vp bread vpon a poste, as a marke, they are not allowed to eate, untill they hitte it, and haue it giuen them by their mothers to eate. So farre *Diodorus Siculus*: with whom *Vegetius* agreeeth. The same *Vegetius* saith that slinges were made either of flaxe, or of haire. The forme was that it had two ends, the one fastened to the hand, the other to let slippe, being broadest in the middelt, lest the stone should fall out. *Diodorus* hath before exprest with what force a stone went out of a sling. *Vegetius* addeth, that they are more violent, then any arrowe: piercing head-pieces, Curaces, and other armes. The same *Vegetius* limiteth the space of their reache to six hundred foote: and saith, that slinges at that distance were seene often to hitte the marke: and attributeth as much to archers. There are, that asseme, that a leaden bullet sent out of a sling will melt with the vehement motion of the aire. Let the credit bee with the reporters. Wee haue not found that experiences in our pieces, which notwithstanding force out their bullet with fire, & that with greater violence, then any hand sling can doe. For stones to bee cast with the hand see *Vegetius*. *Polybius* commendeth the vse of them.

10 The Armour of the *Argilos*] What this *Argilos* should meane, I see learned doubt, and I haue little to say. Whether it come as a diminutive from *argyros* (swiss) or from a City of *Thrace*, called *Argilos*, or from any other originall I will not asseme. Heere if the text bee not corrupted, and the worde crept in, or exchanged by the negligence of some copier, it must signifie a targetier. Which *Ælians* description maketh evident. That there was such a City in *Thrace* you shall finde in *Thucydides*. And that the *Thracian* foote for the most part were Targetiers, I remember, I haue read in *Xenophon*. But then a question may againe arise, siing the inhabitants of that City were not called *argiloi* but *argilioi* (for the City it self was called *Argilos*) why the Targetier should bee called *Argilos*, and not *Argilios*. The change is not great. Many such mistakings are to be founde in transcribing of Copies. But I thinke rather there is an error in the text; and that for two causes. First because *Ælian* diuiding the foote into three kindes, Armed, Targetiers, and light-armed, and discoursing of the armed and light-armed expressly by name, not so much as name the Targetier, but vnder the name of *Argilos*. I ben for that *Lipsius* (whether hee had another copy of *Ælian*, I cannot tell) citing this very place of *Ælian*, citeth other wordes, then heere wee find. The Targetiers, saith hee, (out of



*Alían*, as hee pratedeth vfe, as it were, a middle kinde of arming. For theire Target, called *Pelta*, is a litle light Target, and theire pikes come much short of the Pikes of the armed. *V*neleffe happily *Lipsius* haue borrowed the wordes out of *Suidas* imagining them to be *Alíans*, and so citeth them vnder his name. For I finde them in *Suidas* in the explication of military appellations: but I finde them in noe edition of *Alían*, that hit herto hath bene printed.

11 A litle flight target called *Pelta*] *The forme of this litle target is diversly expressed by diuers Authors.* *The Scholiastes of Thucydides* giueth it a Tetragonal or fouresided shape: with whom also *Iunperus* *Suidas*, *Hefychius* saith, *Pelta* is a litle target having noe circumference, meaning, I thinke, it is not round. Hee saith also it is a Thracian weapon: to both which significations *Suidas* agreeth. *The Thracians* vsed these kindes of Targets, and often sent these Targetiers to serue the *Gracians*. *d Nymphodorus* (seeking to make a league betwixt the Athenians and *Sitalces* King of Thracia) promised to procure *Sitalces* to send them an army of horse, and *Peltasts* (Targetiers.) *Xenophon* speaking of the Thracians, that assaulted his lodging, telleth, that after the Trumpet sounded, and many of his souldiers came to his aide, the Thracians fled casting, as their manner was, their Targets (*Peltas*) at their backs. *When Dercyllidas* invaded *Bitthymia*, senthes the K. of Thracia sent him horse and *Peltasts* (targetiers) to his aide. But the *Pelta*, that *Alían* heere mentioneth, was rounde. *Suidas* in the wordes, before alleaged by *Lipsius*, as out of *Alían* called this Target *Alpidice*: that is a litle *Alpis*, such as the *Macedonians* bore, which were without all question rounde. *The invention of this Pelta* is attributed to *Iphicrates* the Athenian. *For whereas the Athenians* before his time vsed large round targets (*alpidies*) which were not so easy to be wielded, being heavy, he provided them litle targets to which them light, and quick for all service. He altered not the forme of the roundnesse, but diminished the weight, in abating of the breadth. *Emilius Probus* saith, hee made them beare litle targets (*Peltas*) in steede of large rounde targets (*Parme*), where vpon they were ever after called *Peltastæ*. *The invention therefore of this kinde of Target* is attributed to *Iphicrates*. For the litle targets of other formes were long before the age of *Iphicrates*. *Cyrus* the younger had *Gracian* Targetiers in his army: and the *Gracians* at their returne out of *Persia*, and likewise those, that ioyned with *Thrahybulus* to recover *Athens* out of the handes of the thirty Tyrants. All which were before *Iphicrates* time. *Lipsius* taketh the *Pelta* to differ little or nothing from the *Parma* velitaris of the Romans, which doublelesse was round. *Polybius* saith, the Roman horse-mens targets (*Parme*) were like to Cakes named *Popana*, which according to *Suidas* were broad, rounde, thinnne Cakes.

12 And his pike is much shorter] *If it be as Diodorus Siculus* and *Emilius Probus* report, that *Iphicrates* was the inventor of the armes of the Targetier, the pike should be litle shorter, then the *Macedonian* pike. Hee gaue them litle targets for great Targets, and doubled the length of theire pike, and sword. If the length of the pike were doubled, I cannot see, how it should come much shorte of the *Macedonian* Pike. But it may be, they were long at first, and that afterward vfe, and commoditie brought them to a lesse size, to the end the souldier should be nimble and ready at charges. But had the *Peltast* noe other armes, then are heere mentioned: Hee had. And first hee had a linen Curace for lightnesse sake, and then a sword of double length to his former sword. Further hee had darts: *Xenophon* telleth that, in the battaile betwixt *Artaxerxes* & *Cyrus*, *Tissaphernes* charged the *Gracian* Targetiers, whoe diuided themselves into two parties, and plied his horse with darts as hee passed through them. *The same Xenophon* afterward telleth of the Targetiers vnder his commaunde, that hee directed them, to hold

hold their fingers in the thongs of their darts, and bee ready to throw, when hee gaue a signe: And that these very Targetiers of *Iphicrates* with their darts and other misine weapons destroyed a whole Mora of the *Lacedemonians* without coming neere or closing with them. Yet *Leo* giueth the Targetiers noe more, then targets, and speares (*Dorata*.) But in that (as in many other things) I make noe doubt, hee followeth *Alían*, whose wordes also hee well nigh reteynes, as well in this place, as many other. In perusing the story of *Alexander* (in *Arrian*), the most faithfull historian of his deedes) I finde noe Targetiers by the name of *Peltastæ* in all his army. The names of Armed, of archers, of Darters, of slingers I meete often: but not of *Peltastæ*. Which made mee once doubt, whether *Alexander* ever vsed them or noe. Since vpon better consideration I am induced to thinke, though the name in the story saileth, yet the kinde of souldiers, so armed, and so appointed, as *Alían* describeth, may easily be found: and that vnder the name of *Hypaspistæ*. Which name albeit must vsually signifie him, that carries another mans Target, yet it is also applied to souldiers, that are neither light, nor heavy-armed, of which kinde the Targetiers were, as a meane betwixt both. That *Hypaspistes* signifie noe heavy-armed, may be evident by the wordes of *Arrian*: *Alexander*, when hee saue the streights of *Cilicia* possilled with a strong garrd, left *Parmenio* behinde withall, that were heavy armed, himselfe about the first, watche taking the *Hypaspistæ*, and the Archers, and the Agrians (who were darters, as I haue shewed) led on in the night toward the streights, purposing to fall vpon the watche, before hee was looked for. Hee left all the heavy-armed with *Parmenio*, and tooke the *Hypaspistæ* with him. And in another place hee saith: *Alexander* commaunded the *Hypaspistæ* first to passe the river, and after that the *Macedonian* armed. Hee distinguisheth the *Hypaspistæ* from the armed. And straight after: Three dayes after *Alexander* vnderstanding that *Cleitus* & *Glaucias* were ill lodged with their army, & neither held watche, nor had cast a trench for their owne security (for they imagined *Alexander* marched away for feare) and that their Campe was stretched out to a needlesse length, secretly repassed the river a litle before night, leading with him the *Hypaspists*, and the archers, and the Agrians, and the Phalanges of *Perdiccas* and *Coenus*. And in the same booke at the assault of *Thebes*, when *Perdiccas* had engaged himselfe and brought *Amyntas* with his troups in the same danger, *Alexander* lothe to leane them in hazard, aduanced with the rest of his army, and gaue a signe to the archers and Agrians to enter the trench, the *Agemata* (*Livy* translateth them legions) and *Hypaspists* hee held without. So that in all these places hee distinguisheth them from the heavy-armed, and maketh the *Hypaspists* one, the heavy-armed another. I might alleage other passages out of the same author, but these will suffice. That they were not of the light armed may be proued by the same places of *Arrian*. Where they are alwaies distinguished from the archers and Darters. There targets make them vnfit for slingers, and mention of slingers I finde in other places. The very name sheweth that they carry targets, and the great Etymologicon alloweth them spears beside their targets. Whereby they are clearely exempted from the light armed. It remaineth then, that they be the *peltastæ*, which *Alían* heere speaketh of, especially since they were armed with target and speare, which armes hee giueth to his targetiers, and to no other, except it be to the armed.

13 Cataphractis] The horsemen are diuided into two kinds, *Cataphractis* complete armed, and not *Cataphractis*. *Cataphractis* are those, that cover themselves and horse with armor. Not *Cataphractis*, that fight with lances, or with stinging weapons. *Livy* termeth *Cataphractis* (*Loricatos*) because they wore cuirasses. The other sort are either lanciers or *Acrobolists*. *Acrobolists* came not to the shocke, but plyed the enemy a farre off with



slung weapons. The Launciers closed, and charged the enemy with their lances. The word Cataphrasto (to cover with arms) giveth name to the horsemen Cataphracts: and as the horsemen are called Cataphracts, so is the furniture of horse and man called Cataphragma. How they were armed *Ælian* sheweth when he saith they cover themselves and their horses with armour yet was it not always, that the whole horse was armed. <sup>a</sup> For *Xenophon* speaking of the Persians in the time of the elder *Cyrus*, saith, they armed their horses with frontlets and pectoralls & covers for their thighs. As much hee saith of <sup>b</sup> the six hundred horse that followed *Cyrus* the younger against *Artaxerxes*, saying they wanted cover for their thighs. The horsemen themselves he giveth great Curasses, and cuisses, and head-pieces. So it appeareth that the horse were not all over armed, but onely their heads their breasts and their forethighs. *Plutarch* speaking of the Cataphracts in the time of *Lucullus*, saith, their legs, and thighs were unarmed. Concerning the Parthians *Suidas*, I know not out of what Author, hath thus: The Curasse of the Parthian horsemen is made in this manner: The part before covereth his breast, and thighs, and his hands to the fingers end, and his legs. The hinder-part, his backe, and necke, and all his head. There are buttons made for the sides, with which both the parts being fastened, it maketh the whole horsemen seem, as if hee were made of iron. The iron neither hindereth the stretching out, nor the gathering vp of his limbs, it is so exactly fitted to the nature, and life of all parts of the body. Likewise they arme their whole horse with iron, except his hooves, because their owne armour would little avails, in case their horse miscaried. *Curtius* describeth the forme in the Persian horsemen, whose furniture, hee saith, was made of plate fastened together in continued dependances of scales of iron. <sup>c</sup> *Appian* speaking how the Parthians seeking to terrify *Crassus*, and his army, upon the suddaine cast away the covers of their armour, and both themselves appeared in shining curasses, and head-pieces the Asian iron of which they were made darting forth a flashing, and dispersed twinkling light, and their horses glistering in brasse, and iron furniture. Yet doubt *Appian* in the same place note, that the bellies of these horse, was not armed. <sup>d</sup> For the french horsemen, saith he, that followed young *Crassus*, when they perceived, how little they prevailed with their staves against the sure, and unpierceable armour of the Parthians, lighting from their owne, and creeping vnder the Parthian horses, stroke them into the bellies, and they impatient of paine and flinging heere, and there, and treading vnder foote, as well their riders as their enemies, died in the place. *Plutarch* hath the like. The Cataphracts, beside their armour of defence, had a lance, or horsemans staffe, to fight with all. <sup>e</sup> *Plutarch* affirmes it: *Lucullus*, saith hee, after hee sawe *Tigranes* his Cataphract horsemen (whose were of most account) defended as it were, by a hill, that had the ground about plaine, and broad, & the ascent (which was about fower furlongs in length) not very hard, or steepe, commounded the Thracian, and gaule horsemen, hee had, to give vpon the flanke, and to put by the lances with their swords: For the onely strength of the Cataphract is his lance, and it alone hee is able to vse either in defence of himselfe, or annoying the enimie: being by reason of the weight and hardness of his furniture like a man shutt, and locked vp in a wall. *Heriberto* to *Plutarch*. Like wise the Parthian Cataphracts, albeit they vsed bowes, and arrows yet they had also lances, with which they came to the shock with the enimie. <sup>f</sup> When the armie of *Anthony* (saith the same *Plutarch*) sawe the Parthians ready to give on, the armed turning their faces about toward the enimie, tooke in the light armed, and shutt them vp with in their battels: themselves kneeling vpon one knee,

head

held out their targets before, the second ranks with their targets covered the heads, and vpper parts of the foremost, & the following ranks did the like one for another, the figure was like the tiling of a house, & represented a shew worth the seeing, and was the surest defence that might bee, to make the arrows glaunce of, without harme doing. The Parthians imagining this kneeling proceeded from wearinesse, and faintnesse, layed aside their bowes, and taking in hand their lances, ranne vpon the Romans, whose giuing a iointe shewte sprung vp presently, and striking them with their darts, slew the first, and put the rest to flight. By these two testimonies the lance of the Cataphract is clearly proved. In what manner the Cataphracts came to fight, *Nazarius* (cited by *Stewechius*) sheweth plainly in a Panegyrick of his. The Cataphracts, saith hee, in whom: was the principall strength of the field, vse this discipline in charging. After closing their files, they keepe an equalitie in moving forward to charge, & being free from wounds, they break without difficulty any strength of battel opposed against them. They are saide to bee free from wounds, because both themselves & horses (especially before) are covered with sure armes. Their moving must be slow, because of the weight of their armes, which slownesse was recompensed with the violence of their charge, which neither horse, nor foote was able to resist. And yet they had another inconvenience, in that, being overthrown, or slipping, or falling to the ground, neither horse, nor man, were able easily to raise themselves againe. Such was the weight of their armour.

14. Launciers are such] Launciers, saith *Ælian*, ioine with the enemy, & fight hand to hand with the lance. And did not the Cataphracts so? They did, but their armour differed much. The Cataphracts both horse, and man, were all over armed. The horse of the Launciers was not armed, and himselfe, albeit hee were armed, yet not so armed, but that many parts of his body were bare of armes. And his armour came much short of the compleate. *Arrian* saith that the Macedonians being Launciers were not able to encounter with the Scythians, whose were Cataphracts, both because of their number, and also of their manner of arming. And as the Launciers armour was not so heauie, as the Compleate, so was it more heauie, then the armour of the foote. *Xenophon* seemeth to signifie so much, telling of himselfe, that taking the targetiers of the front, and some out of the midt of the hollow square battail, and three hundred chosen men, that *Cherisophus* had with him in the front, hee marched away with all speed to scile vpon the toppe of a certaine hill. <sup>b</sup> And exhorting his souldiers to haste, you may well, quoth *Sotridas*, the Sicilian, talke of a haste, that are on horseback. In the meane time with this heauie target, am scarce able to marche. *Xenophon* hearing this, freight dismounted, and disranks *Sotridas*, tooke away his target, and with it on his shoulder continued his hast in marching. By chance hee had on at that time a horsemans armour, where with although he were overpressed, yet slacke hee nothing of his pace. The rest of the souldiers beating and reviling *Sotridas* compelled him both to his target, and place againe. At last they gained the hill, they purposed, and made the enimie abandon the nether ground. *Xenophon* was heere overpressed with the horsemans armour. If it had bene but equall in weight with a foote mans, hee might, as well have endured it, as the rest. *Plutarch* sheweth likewise the weight of the horsemans armour. *Philopamen*, saith hee, willing yet to giue more strength to the Kings party (hee meaneth *Antigonus*, the gardian of *Phillip* afterward King of Macedonia) & to come to hands with the enemy that was already in route, lighted from his horse, and in a horsemans Curace, and heauie armour,

*Stewechius* in comment. ad. 2.2. caput lib. 8. v. 654.

<sup>a</sup> *Appian* in *Parthica* 146. A.

<sup>b</sup> *Xenoph.* de cec. 104. Cy. lib. 1. 324.

<sup>c</sup> *Plutarch* in *Philopamen*.

<sup>a</sup> *Xenophon* *Cyru* lib. 6. c. 10.

<sup>b</sup> *Xenophon* de cec. 104. Cy. lib. 1. 324.

<sup>c</sup> *Appian* in *Parth.* 143 D.

<sup>d</sup> *Appian* in *Parth.* 143 D. & *Plutarch* in *Crasso*.

<sup>e</sup> *Plutarch* in *Lucull.*

<sup>f</sup> *Plutarch* in *Anton.*



compell the Ligurians to forsake the frights, they hold, and runne severall wayes to defende their owne. The Consul much commended the man, and laded him with hopes of promises. The Numidians vpto horse, and began to ride heere and there, before the enemies guards, provoking yet no man. Nothing at the first fight was more contemptible. The horse, and men, were little, and lean. The horseman vnbridged, and vnarm'd, saving that hee carried darts; the horse without a bridle galloping deformedly with a tuffe neck, and a head thrust out at length. They purposely augmenting this contempt slid from their horses, and dallied, and sported, to bring the enemy to a gaze. Wherefore the enemy, which at first were intentiue, and ready for a charge, became gazers on, and the most part vnarm'd themselues, & sett downe vpon the ground. The Numidians rode vp neerer, and then backe againe, and by little, and little, got to the skirts of the forest; as if their horses, being resty, had caried them forward against their wills. At last, putting spurres to, they broke through the middle of their enemies guards, & entering into a larger field, they sett fire on all the houses next the way, then burned they the next village, and wasted, and filled, all things with fire, and sword. The smoke first scene, then the cry of the people affrighted, laily out men, and children, flitting for succor, raised a tumult in the campe. Therefore without counsell or commaund every man of himself ranne to the defence of his owne, and in a moment both the enemies campe was forsaken, & the Consul, delivered from his siege, came to the place intended. *By these two examples the kinde of fight, that these darters on horse-backe maintained, may be perceived, which was 'not to come neere the enemy, but to keep a loose, and lett their darts fly. Besides not to observe any order in files, or ranks, but straglingly to gallop the field, seeking by their disbanding to tolle the enemy out of his strength, and so to worke their aduantage. And albeit in the second example, the Numidians vsed not their darts, yet they would haue done it, if need had bene; and you shall find in other places of Livy, and Polybius, they did vsually, as all in Caesar.*

19 After they haue spent one or two] *These darters on horsebacke differ from the other before mentioned, because at the last they ioyne, and fight hand to hand with the enemy; which the other did not. And what fight they wish all: not with lance; for then should they be Launsiars, of whom wee haue spoken. But they fight with barrell-axes, swords, and such other short weapons. Suidas affirmeth it, alleged by<sup>d</sup> Arcerius: Thelc, *fiith hee*, at fiit cast light darts a farr off, and afterward approaching, ioyne with the enemy, fighting with barrell-axes, or swords; which kind they call light-horfemen.*

20 The horsemen, that vsf bowes] I need not alledge any thing to shewe that the Scythians were good archers. It is knowne to any man, that is not ignorant of History. I will onely note, that in fliing from the enemy, they harmed as much, as in fliing on. For as they fled they turned half their bodies backward, and shotte at him, that followed, and executed not such thing. Of which fashion of fight Plutarch giueth this indgement. « The Parthians, saith he, in their flight shoote backward, & doe it best of all other, except the Scythians, the invention being witty, both to faue themselves by that defence, and also to take away the shame of flight, That which Plutarch attributeth to the Scythians and Parthians, Xenophon saith, the Persians vsed also, both for manner of fight, and flight.

*The framing of a Phalange, and definition of  
the art Tactick.*

### СНАР. III.

**B**Vt seeing every *Phalange* containeth an vniting of *bodies*, *offices* of command, *orders* in place, a Convenient number of men, and wordes of *Direction* aswell for daily exercise, or trayingn, as for true *fights*, It seemeth necessary to deduce euery of these things into particularity. The first labour therefore in the art *Tactick* is for a *Generall* out of a multitude, that cometh to hand confused, to chooseth the fittest men, and dispose them into convenient places (that is to order them into *files*, and *bodies*) and of the whole number to proportion a reasonable leuie, & fitting the seruice in hand. <sup>3</sup> For to dispose and enable an Army, skillfully to march, to encampe, & to embattaile, is a matter of no small consequence. In as much as we often find mightie Armies through their disorder to haue been defeated by <sup>4</sup> a handfull of men wel disciplined & exercised. Wherefore *Aeneas* defineth this art to bee a *science of warlike motion*: *Polibius*, To be a skill whereby a man taking a multitude seruiceable or deresh it into *files*, and *bodies*, and instructeth it sufficiently in all things pertaining to warre.

### Notes.

**THE** first labour] *After provision of armour followeth choice of men. What men, and out of what Climates, and of what profession, and of what age, and of what constitution of body, and of what education, are to be chosen, because Alian referreth to the discretion of the Generall, not setting downe any particular, I will likewise passe over, noting only some places, where hee, that is disposed to seek, may find the circumstances of choice of souldiers. Xenoph. Cyrop. lib. 1. 3. 2. A. B. Polyb. lib. 6. 406. C. Art. Lixp. ad Polyb. lib. 1. Dialogo. 2. 3. 4. 5. Veget. lib. 1. cap. 2. 3. 4. 5. 6. 7. Et Stewechinus ad*  
*de omnia cap. 37.*

2 A reasonable and fitting the service] Levees are to be made according to the warre, which is undertaken. The enemies is not alwaies of one strength, sometimes the forces, against which wee are to lead our armie, are more, sometimes lesse. The Romans; if the number of enemies were not very great, used but a Consular Armie, which consisted of two legions of Romans, and of as many foote of their Allies; when greatest, onely toynd two Consular armies together. And for Allies their foote, as I said, was equall with the Roman foote, their horse were treble as many, and the Romans having three hundred horse to a Legion, the Allies had nine hundred. In case of great necessity, wee read, that the number of the Legions was increased in a Consular armie. Polybius reporteth that, a little before the battell of Cannæ, the Consuls Lucius Æmilius, and C. Terentius, had allowed in their armie, which they led against Anniball, eight Legions, which never was done before. Alexander the great being to invade the Kingdome of Persia, which for wealth, multitude of men, and largeness of Territorie, was esteemed the richest, mightiest, and greatest Empire: at that time in the world, had not in his armie above one and thirty thousand foote, and five thousand, and odd, horse. Armies composed of multitudes are neither fitt to be guided, and commanded, nor yet to be provided for.

**D** *Ano*

a Xenophon lib. 4.  
cap. 1.

b Xenophon Ag-  
gila.

And hee that trusteth to multitudes, esteemeth not greatly the valour of his souldiers. <sup>a</sup> Xenox saide, he was not foiled by the Grecians through default of number, but because hee wanted men. As it is folly to leuy more men, then is needfull, so is rashnesse, or rather madnesse to put a few souldiers to hafard against forces, that exceed in number, and valour. Briefly all levies are to bee tempered with consideration of persons, times, places, and other circumstances.

3 For to dispose and enable an Armie] Heere are sett downe in a word, as it were, the principall heads of the art of warre, Marching, Incamping, and embattailing; to which beides aliother may very well bee referred. And of these three Aelian handleth in this treatise but two, namely embattailing, and marching: of embattailing, so much, as pertaineth to forming of a common Macedonian Phalange, of Marching, no more, then belongeth to embattailing in a march, that is to ordering of your men in that figure, which shall yeald most advantage against the enemy, that meeteth you; excepting that hee shortly toucheth the marshalling of baggage in your marches. The other considerations of marching, as laying, or avoyding ambushes, sending out to discover, when to march by night, when by day, how to deceiue and avoyde the enemy lyeng neere, remedies against horse, against shotte, against multitudes, passages of mountaines, of woods, of rivers, of plaines, of drye, and sandy places, these, I say, and such like, hee toucheth not in a word. And for the skill of encamping, which comprehendeth the seating of your camp, and provision of all things belonging thereto, as also the siege, and defence of Citties, and fortresses, hee likewise passeth it over with silence, as a thing not incident to his purposed discourse.

4 A handfull of men well disciplined and exercised] What exercise doth for the making of good souldiers, experience of former times will teache. It hath been the manner of all famous generalls to bring their souldiers to perfection by exercise. <sup>a</sup> Vegetius saith very well; It is not length of life, or number of yeares, that teacheth the art of warre, but continuall discipline & meditation of armes. Let a souldier serue never so many yeares, so long, as hee is vnexercised, hee shall bee still a raw souldier. The knowledge and science of armes maketh a souldier, which is not geyned but by action. As long as a souldier handleth not his weapons, hee is noe Actor, but a looker on. For as all abilities in artes (which are called Habits) arise out of a number of actions preceeding, so can noe man attayne to a perfect knowledge of armes, till hee haue with care, and diligence, employed his study and labour therein, and vpon the foundation of practise raised the frame of sound and perfect skill. Noe man is naturally borne a souldier. One may more incline to warre then another, but the skill commeth not without industry and paines. <sup>a</sup> Plutarch saith, that it is neither Eurotas nor the place betwixt Babyx and Gnacion, that bringeth forth valiant and warlike men, but they are to bee fownd in all places, where youth is bred vp in shame of vice, and boldnesse to vndergoe perill for vertues sake. Eurotas was a river

neere Lacedemon; <sup>a</sup> Babyx and Gnacion two rivers with in the same City. The Lacedemonians were accounted the most valiant people of Greece. And Plutarch speaketh this of the victory, which the Thebans had against the Lacedemonians; The Thebans, which till that day had noe reputation of valour, but afterward by exercise, & vse of armes, under Epaminondas, and Pelopidas, became the bravest souldiers of Greece: Not unlike was the seating of Pyrrhus to his muster-master: choole you, said hee, good bodies, and I will make them good souldiers. The strength of the body is requisite in a souldier to vndergoe the labours of warre; but exercise it is that giveth the perfect skill, and the desire to handle weapons. Therefore as Demosthenes, being demanded what was the first and principall thing in the arte Oratory, answered Action, what

f Vegetius lib. 1. ca. 1.  
g Cicero in Brutus.

what the second, Action, what the third, Action: So may wee truly say, that in the arte military exercise is not onely the first, second, & third, principall thing to make a souldier, but also all in all. Aelian speaketh not of exercise but in General: what particular exercise is fitt for a souldier, hee, that desireth to knowe, let him reade, Xenophon. Cyrop. lib. 2. 42. B. C. & lib. 3. 77. C. D. Veget. lib. 1. ad caput. 9. ad caput. 19. & lib. 2. caput. 23. 24. Iust. Lips. comment. ad Polyb. lib. 5. dialog. 14. Leo. caput. 7. Patric. Parallel. parte 2. 139. Now for the victories, that haue bene obteyned by a small number of men well exercised, against a multitude vnskillfull, and vntrained, I need, say nothing. Histories are plentiful witnesses therein. I will onely recite one example wherein the difference may bee seene not between skillfull, and vnskillfull, but between skillfull, and skillfull both enured to labour, and both brought vp vnder the same practise, and discipline of Armes. At what time, after the death of Alexander the great, his chiefeest Commanders fell at oddes emongest themselves; and sought every man to establish himself in the possession of his Conquests, it chanced, that Antigonus, and Eumenes came together in two sundry battailes. In the first Antigonus had in his army about 28000 foote, 8500 horse, & 65 Elephants; Eumenes lesse foote, 17000 in all (but emongest them 3000. Argyraspides, whoe had served in all Alexanders battailes, & were invincible, & strook a great feare into the enemies hearts) & about the number of horse, his enemy had, & 80. Elephants. <sup>a</sup> When the foote came to ioyne, saith Diodorus Siculus, the fight continued a good while, & at last, many falling on either side, Eumenes his foote had the better by reason of the valour of the Macedonian Argyraspides. They, albeit they were froken in yeares, yet in regard of the manifold perills, they had been in, excelled in courage, & skill of fight, in so much that no man was able to withstand them, And therefore being but 3000. in number, they were notwithstanding sett against the enemy, as the strength of the whole army. In the other battaile he speaketh of their age. <sup>b</sup> At that time, saith he, the yongest of the Argyraspides were noe lesse, then 60. yeares olde, or thereabout; the most of the rest about 70. & some were elder, al of the vnmarcheable in skill & readinesse of fight, & strength of body; such was their dexterity, and courage gathered in continuance of dangers, which they had passed. Afterward rehearsing the battaile, he saith: The Argyraspides ferring themselves close, and with liuely force falling vpon the enemy, killed some, and put other some to flight, And fought against the whole Phalange of the enemy with irresistable fury, not loosing one of their owne men, & yet through skill & manhood slaying of the enemy above 5000. & routed their whole foote, which in number were many times more, then themselves. Thus writeth Diodorus Siculus of the olde practised Macedonians: who yet fought not against straungers, or rawe souldiers, or such, as were newly brought into the field, but against men of their owne nation, that had long handled armes, & wonne many victories, & been instituted, and trained in the same discipline and course military, that they themselves had been before: Such difference long practise, and experience wrought in the one against the other.

What a file, or Decury is, and of how many men it consisteth.

#### CHAP. IIII.

To order into files is to make files. A file is a number of men beginning at one Leader, and continuing in order of followers to the last man.

D 2 The

The number of a file is diversly given, for some allow it eight, some twelue, and some sixteen men. Wee for this time will retain the number of sixteen, both because that number is proportionable to the indifferent length of a Phalange, and also, if we require at any time to double the depth thereof, and to giue it thirty two men, or to lessen, and contract it, and make it but eight; neither of both shall hinder the service of the light armed behinde, for whether they vse Darts, or Slings, or Arrows, they may easilie with their flieng weapons overreache the depth of the Phalange.

## Notes.

**N**Ext after arming, and choyce of souldiers, it followeth to put them in order for service, that is first to file them, then to band them (which is ioyning of files) and lastly to embataile them, which is to make a Phalange. Of these in the following chapters.

**1** To make files] The Tactics haue not exprest the precepts of this arte all in the same wordes. A file is heere called Lochos, the signification whereof is diuers. Sometimes it is taken for an Ambulche, and Lochan signifieth to lye in Ambush: it signifieth beside a number of men, that are of one body, as it were, and vnder one commander, who is called Lochagos, and Lochizo is to sett in files. The number of this body hath bene diuersly taken. The Thebans Lochos Hieros first instituted by Gorgidas, or as other say by Epaminondas, consisted of three hundred men. The Lochos of the Lacedaemonians of fine hundred and twelue. Xenophon in his returne out of Persia telleth, that the number of the Lochoi of the Gracians, which hee ledde, was almost a hundred armed men. And when they chose extraordinary men to preserve the Plaxium (a hollow forme of square battail where in the Gracians marched) from breaking, they appointed six Lochoi, of a hundred a peece, for that purpose, and Commanders to leade them. And after hee reckoneth seventy men to a Lochos. And in the first booke of Cyrus his expedition, hee telleth of two Lochoi of the armed of the Regiment of Menon, that were slaine by the inhabitants of Cilicia, and counted them a hundred men. Cyrus in the same Xenophon commandeth his Lochos to bee made of twenty foure men. But the Lochos, that Alian heere speaketh of is a lesse number, namely sixteen, which was the file of the Macedonians, as appeareth by Arrian, and Polybius. Albeit Arrian calleth it not Lochos, but Decas; and Polybius the depth of the battail. This number of sixteen was used by the Gracians also before King Phillips time, as appeareth by Xenophon in his historie of the Gracians. And likewise by Thucydides, who reporteth, that the Siracusans were so ordered against the Athenians. Leo saith it was the manner of the ancient warriers to make a file of sixteen, & call it a Tetragonall number.

**2** Some allow it eight, [some twelue] The Lacedaemonians made the depth of their battail sometimes eight men (for a file is it, that measureth the depth of the battail) and so fought with their enemies. Thucydides witnesseth as much: the Lacedaemonians, saith hee, were not alwaies ordered in depth alike, but as their Lochagoi (they were commanders of five hundred and twelue a peece) thought good, commonly notwithstanding the depth was of eight a peece. Xenophon also writeth, that Dercyllides the Lacedaemonian, being to fight with Tissaphernes, and Pharnabazus, ordered his Phalange into eight. The same proportion was helde by Mnassippus the Lacedaemonian against the Corcyreans, and

and by Clearchus the Lacedaemonian against his enemies. Xenophon saith, that Thrasybulus the Athenian, falieng out of Pyreum against Pausanias the Lacedaemonian King, ranged his men into eight. His wordes are: When Thrasybulus and the other armed saw these things, they quickly gaue aide to their owne people, and put their armed in order eight deepe. Pausanias being hardly layed vnto, and retiring foure or fiue furlongs, commaunded the Lacedaemonians, and their Allies, to resort vnto him, and there casting his men into a deepe Phalange, ledde against the Athenians. Out of which wordes wee may note, that the Lacedaemonians observed not alwaies that order of eight deepe, but varied according to place, or other circumstance. Yet ordinarily they gaue but eight to a file, or to the depth of their Phalange, as Thucydides witnesseth before. The same Thrasybulus with his complices entering the base City of Athens called Pyreum to free his countrie from bondage of the thirty tyrants, having but a few with him, possessed the court, which led to the temple of Diana, called Munychia, and being assaulted by the garrison of the Lacedaemonians, ordered his armed men into ten deepe, and the light armed behinde them. The tyrants, and their followers stood in battail fifty deepe. At the battail of Leuctra the Lacedaemonian armed were twelue in depth, the Thebans fifty. Alexander the great leading his armie against Clitus, and Glaucias, the way being so narrow, that no more then foure might marche in front, made the depth of his armie a hundred and twenty. And the souldiers that Xenophon brought backe out of Persia, when they purposed to sacke Byzantium, put themselves without commande in order of fifty deepe. In the text is fifty deepe, but the margin hath eight: which I take to bee the truer reading, because Xenophon saith, the place was faire to sett a battail, being void of building, and having an even plaine. And it was not the manner of the Gracians to make a Phalange fifty deepe, vnlesse there were extraordinary occasion. In the battail of Delos betwixt the Athenians, and Thebans, the Thebans were five and twenty in depth, the Athenians but eight. The same Athenians were eight in depth against the Siracusans. So that the depth of eight was much used among the Gracians. How be it I find not, that they called a file of eight by the name of Lochos. Cyrus the elder made his files of twelue men, and the leader thereof hee called *ἑκατάτακτος*, and *ἑκατάτακτος*, and the file is selfe decas, which in signification albe it importen ten, yet wee must retain the word, as it is used, and not fly to the originall of the Etimologie, as I noted before vpon other occasion. But Alian maketh his file of sixteen. His reason followeth.

**3** For whether they vse darts &c.] The file being sixteen in number, the souldiers therein every one having after distance from other three foote, take up in the whole depth forty eight foote, and being doubled to thirty two men, they take up ninety six foote, which amounteth to thirty two yards. That bowes and slings easilie out reache this distance, appeareth by Vegetius, before by mee alleaged, who saith, they stroke their darte a man may rather doubt, which notwithstanding with an exercised arme is sent much further, then thirty two yards. Lipsius writeth, that a dart was usually cast foure hundred foote, which amounteth to a hundred thirty three yards, or as wee in shooting measure it, six score and odde. The reason why Alian placed the light armed behinde wee shall see beere after in fitt place.

The order and parts of a file, or  
Decury.

CHAP. V.

THE best man of every file is the first in place, and hee, that leadeth the file, who is also called the *file-leader*, the *Commander*, & the *fore-stander*. The last man of the file is called the *Rear-Commander*, or *bringer-up*. The whole file it self is termed <sup>a</sup> a *verse*, and <sup>1</sup> a *Decany*, and of some <sup>4</sup> an *Enomoty*. Yet there are, that hold *Enomotia* for the fowerth parte of a file, and the Commander of an *Enomoty* they call *Enomotarcha*, and two *Enomoties* they take for a *Dimery*, & name the Commander thereof *Dimerites*, so that the half file is said to bee a *Dimery*,<sup>5</sup> and the Commander *Dimerites*. This man is the last of the file. Hee, that standeth next behinde the *file-leader*, is named a *follower*, and the next after him a *Leader*, and the next after him againe a *follower*. So that the whole file consisteth of *Leaders*, & *followers* placed successiue one after another. <sup>6</sup> It be-houeth the *file-leader* to bee more sufficient, then the rest of the file, and next him the *Leader* of the half-file, or *bringer-up*. They define a file to bee a *Rowe* of followers placed according to their worth successiue after a *file-leader*.

Notes.

1 THE best man of every file.] Why the *file-leader* ought to bee the best man of the file many reasons may bee given first because hee commandeth the rest. And as in all other things hee that is to rule, and governe another, ought to haue more knowledge, then hee that is commaunded, and governed, so is it in matter of warre. Further, as his skill, so his valour, ought to bee most: that his example may incourage and incite the rest. Which is the cause, that other commanders also are placed in front, and in the eye of the souldiers that their valour & forwardnes may breed an honest emulation in the souldiers to doe, as they doe. Besides, the first place is most besecming him, that best deserueth, and the more valiant a man is, the more hee desirerh to shewe it in the face of the enemy, thereby to winne himself honor, and reputation. Furthermore, hee may doe best seruice in the front, by entering into the enemies battaile, and making way for the rest. Not unlike a sword, whose edge maketh speedy passage into the thing, it cutteth, and draweth after it the rest of the iron, bee it never so blunt. In the front, the ranke of the file leaders giue the push to gaine the field. Which reason I thinke lead<sup>a</sup> Gorgidas the first instigator of the Theban Hieros Lochos, not to make an entire troupe thereof apart, but to place it man by man in the first ranke of the Phalange. Lastly the sight of the file leaders, being the choice of the armie, both for stature, and resolution (for so Alian would haue them)<sup>b</sup> breeds a terrour in the minde of the enemy. Who, seeing such gallants in the front, haue cause to imagine that the rest of the armie, which they see not, is like to those they see. And, being never so valiant, they had rather haue to doe with weake, and relenting then stout, and resolute aduersaries. As at the battaile of Cannae<sup>c</sup> Annibal answered one, that brought him newes, that the Consul had commanded the horsemen to alight, and fight on foote, how much rather would I, quoth hee, hee had delivered them bound into my hands. I haue heard many hold opinion, that the manner of the Grecians, to bring their best men first to fight, is contra-

<sup>a</sup> Plutarch in Pericles.

<sup>b</sup> Alian cap. 11.  
<sup>c</sup> Liv. lib. 24. 5. 7.

<sup>d</sup> Liv. lib. 24. 4. 31.

ry to the institution of the Romans, who held the Triarij (theire eldest, and best souldiers) in the rear, and brought them not to ioyne, till both the Hastati, and Principes were beaten, or retired. But if wee consider the diuersity of both theire embattailings, wee shall see no great difference, or as leste wee shall see, that the reason of placing their best men was not much different. The Gracians in framing their foure-fold Phalange made in length an even front of a 1024. files. The files were 16. deepe. and the best men therefore in front, because being placed in the midst, or in the reare, there would haue bene no vse of their valour, and the Phalange might haue bene broken, before it had come to their turnes to fight. The Romans contrary-wise, in ordering a Legion, made many maniples, and gaue the front to the Hastati, the midst to the Principes, the reare to the Triarij. Nowe the Triarij being ordered in the Reare, might at the beginning bee brought to fight in Front, if need were; being noe need, they kept their place, till their Generalls found it fit to call vpon them. So then this is the difference. The File-leaders of the Gracians had the Front, because otherwise in so deep a body, as the Phalange was, they could not haue come to fight: The Triarij might alwayes haue bene employed in Front, in flanke, or in the reare, as pleased the Generall. And that the Romans also in their seuerall Maniples placed their best men in Front, I cannot doubt. There stood the Centurions, which were the leaders of the Maniples, and in reason were to bee seconded with the best men vnder their command. <sup>a</sup> C. Crastinus may serue for an example Whoe being noe Centurion, but an Evocate, in the battaile of Pharsaly betwixt Casir & Pompey, bidde his Manipulers (they were of the Maniple, which hee once commaunded) to followe him, and said hee would make his Generall giue him thanks aliuie, or dead. Yet must I confesse, that the front was not the proper place of the Evocates. But hee chose the front, and held it a place worthy of his valour. It is said of <sup>b</sup> Casiline that, when hee fought with C. Antonius, hee placed in the front of his army, all the chosen Centurions, and Evocates, and besides of common souldiers such, as were best armed. <sup>c</sup> Livy speaking of a fight betwixt the Romans, and the Latines, and describing the forme of the Roman battaile, after hee had limited the place of the Hastati, & Principes, writeth thus of the Triarij. After the ensignes (hee meaneth the Standards of the Legions) not the Ensignes of Maniples, were ten other Maniples; whereof every one had three Ensignes. The first Ensigne led the Triarij,ould souldiers of tryed valor, the next the Rorarij, not soe well esteemed for strength in either age, or deeds, the third the Accensi, a troupe of left trust, which was the cause, that they were cast in the reare. The Accensi were put in the reare, because there was noe great opinion of their valor; the Triarij had the front, because they were ould souldiers, and had bene sufficiently tryed. Soe then in dividing of their armie into small bodies, or battailions, the Romans differed from the Gracians: in placing the best men of their maniples in front, they observed the same manner, that the Gracians did in placing their file-leaders in the first ranke of the Phalange.

2 A verse] I haue translated Stichos a verse. The more vsuall signification is a rowe of any thing placed orderly. <sup>a</sup> Soe Xenophon applieth it to trees, which were planted orderly one after another, and <sup>b</sup> Eustathius to the standing of dauncers one after another in depth even as our souldiers are placed one after another in file. <sup>c</sup> Iulius Pollux also acknowledgeth, that there were files, and ranks in Choro, that is in daunces vpon the stage. <sup>d</sup> But Suidas saith it was commonly taken for a line, which was read from the left to right hand. And so say the truth a verse, as wee read at this day, and as they read, when Ælian wrote this treatise, rather resembleth a ranke then a file; because in a ranke men stand side to side, as words doe being placed in a line. Yet because the word is receiued by vse in that other sence, wee must like wise admitte the same.

<sup>a</sup> Casir de bell.  
cauli lib. 1.

<sup>b</sup> Salust. de cens.  
sur. Catilina.

<sup>c</sup> Livius decadi. 2  
lib. 8. pag. 214. A

<sup>d</sup> Xenop. in Oe.  
conom. § 10. C.  
<sup>e</sup> Eustat. in Iliad  
f. fol. Pollux. lib.  
4. cap. 17.

<sup>g</sup> Suidas. in verb.  
do. § 102.

a Xenop. Cyrop.  
b Eymol. Cyrop.  
c Patricius in  
d Leo cap. 4. §. 6.  
e d. 4. §. 6.

Patricius parvuli  
milit. part. 14. 173  
§. part. 1. 154.  
e Suidas in Enom.  
motia.

f Eymol. mag.  
g Hefychius in Enom.  
motia.

h Pol. lib. 1.  
i Arr. 1. 7. 16. 17.

3 A decury] *This in Greeke Ælian calleth Decania, a word, which in this sense I find in no other Author, then in him, and in Suidas. Xenophon calleth it Decas: see doeth Vrbicius and Arrian, and likewise Hefychius. Leo calleth it decarchian and Akian.*

4 An Enomotie] *The word cometh from omnymi to sweare, not of omos a shoulder, as Robertellus, and Patricius imagine; of whom the first translated it in latine Interputio, the other in Italian Spallagione, as it were a backing; upon this conceite, I thinke, because in a file the whole number standeth one at the backe of another. Suidas saith: Enomotia is a body militarie amongst the Lacedemonians of 32 men, and is soe called, because they take theire other together, not to forsake the place assigned them in battaile. With whom agreeth the great Etymologicon; and Hefychius likewise; who termeth it a body militarie, that taketh an othe and sweareth by the sacrifice, which is offered at such time, as they goe into the field. And surely you shall not finde the word Enomotia applied to other souldiers, then the Lacedemonians, or else to them, that the Lacedemonians commanded: untill it was afterward taken up by the Macedonians. And Julius Pollux expressly noteth, that Moira, and Enomotia, are proper appellations of the Lacedemonians, given to certaine of theire militarie bodies. Albeit both the text bee corrupted in Pollux, having Enomotia for Enomotia, & the interpreter hath worse translated it, reading Enomotia, militarie discipline, & Moira a duty. As the Lochos is great, or little, so is the Enomotia, The Lacedemonian Enomotia was 32 men, the Lochos being 512. but the file of Ælian being 16. and the Enomotie noe more, then the fourth part of a file the Enomotie must containe noe more then four men. One of every of these foure must bee a commander; who is called Enomotarcha, or the commander of that Enomotie. So that in the whole file, consisting of 16. there ought to bee foure Enomotarchas. Where they should stand in the file, is a question. Patricius maketh the file-leader the first Enomotarcha, the fift man, the second, the ninth man, the third, & the 13 man the fourth; excluding the bringer vp, whom notwithstanding hee acknowledgeth to bee the second man of the file, and in dignitie next to the file-leader. I am of another opinion; and yet allowe the places of the first, fift, and ninth, but thinke the bringer vp ought to bee the last Enomotarcha: Arrian confirmeth my opinion: who writeth thus: Alexander returning to Babilon, found Prucestes newly come out of Persia, bringing with him 20000. Persians. Then commending the Persians for theire obedience in all things to Prucestes, and Prucestes for his care, and diligence, in ordering them, hee reparted them into bands according to the Macedonian manner. Over every file hee appointed a Macedonian file-leader to command, and next a Macedonian dimerite, and a Decastater, so called of the paye hee had, which was lesse then Dimerites, and more then the common souldiers; then twelue Persians, and last of all the file a Macedonian, who also was a Decastater. So that in the whole file there were foure Macedonians, three, whose pay was more, then the common souldiers, and a file-leader the fourth, and more over 12. Persians. So Arrian. Out of which wordes wee may learne first the number of the Macedonian file, which consisted of 12. Persians, and 4. Macedonians, in all 16. the number, that Ælian requirerh in his file. Next, that the Enomotarchs, or commanders of the foure parts of the file, were likewise 4. Lastly that the bringer-vp was one of the foure by expresse words of Arrian, which is contrarie to the opinion of Patricius, and whereas Arrian termeth the third Enomotarch, Decastateros of the pay, hee received, it is to bee understood, that Stater was a piece of coine, of the weight of foure dragmes of Athens whereof the Enomotarch*

Enomotarch had ten by the moneth. The dragma was of value seven pence sterling, and the Stater, conteyning foure dragmes, two shillings and foure pence sterling; and ten of them were valued at twenty three shillings and foure pence. Which was the pay of the second Enomotarch, and of the bringer-vp, as Arrian affirmeth.

5 And the Commaunder Dimerites] *About the Dimerite Arrian, and Ælian, differ. Suidas leaveth the matter uncertaine, saing the Dimerite is commander of the half-file, but pointeth not out, which is hee. Arrian distinguisheth the Dimerite from the bringer-vp, and giveth a greater pay to the Dimerite, then to the bringer-vp. The bringer-vp, he saith, was noe more then Decastateros, where as the Dimerite had a greater pay. But Ælian twice in this chapter affirmeth, that the bringer-vp was the Dimerite, and addeth hee ought to bee the second man of worth in the file. And that the place of the reare is not much inferior to the front, Cyrus teacheth his bringers-vp in Xenophon in these words: You have a place saith hee no lesse honorable, then they, that stand in front. For being in the reare, and seeing & encouraging them, that behaue themselves valiantly, you make them more valiant, and the remisse and backward you incite, & spurre on, likewise to doe as well, as the rest. Leo appointeth two officers to a file, the file-leader, and the bringer-vp, & so maketh the bringer-vp the second person of the file. The reare being then the second place of the file, I conceive no reason, why, as the file-leader commandeth the one half of the file, so the bringer-vp should not bee the Dimerite, and command the other; and I rather assent to Ælian, that of purpose describeth the particulars of this arte, as hee findeth them set downe in the ancient Tacticks, then to Arrian, that, writing the historie of the deeds of Alexander, stumbleth by chance upon these things not greatly incident to his narration. Yet may there bee a reasonable construction of both their meanings, if wee consider the severall respects of the offices of these Enomotarchs. For the middlemost Enomotarch may bee termed the Dimerite in regard he standeth in the head of the second half-file, and in doubling the front and some other motions leadeth it: the bringer-vp because he absolutely governeth it, and seeth that directions, given by higher officers, bee executed.*

6 It behoveth that the file-leader bee more sufficient] *The file-leader and bringers-vp ought to bee the most sufficient, because they have the whole government of the file, the one in the front, the other in the reare. These are under them, and to bee called by the names of leaders, and followers. But yet is there a further disposition of the file, which, as I finde it in Leo, I will set downe. His words found thus: over the other sixteen you are to appoint a file-leader (as hee is termed) resolute, and fitt for service, and eight of these sixteen, that shall bee found fittest, you shall place in the front, and reare, of the file, foure in the front, namely in the first, second, third, and fourth place, other foure in the reare, in the sixteenth, fifteenth, fourteenth, and thirteenth place, that the front and reare may be strengthened with foure men a peece. The weaker are to bee placed in the middle of the file. This counsell, or rather precept, of Leo hath this reason. The front, and the reare, are the principall places the enemy commonly giveth upon. The front wee alwaies turne against the enemy, if we can. The reare the enemy seeketh to attache, and by it to distresse us, if hee can. The flanks for the most part are secured by the horse, and light armed. For Leo placeth the light armed, and horse in the flanks. See these two places, being most subject to the violence of the enemy, require extraordinary care, and assurance. As for the weakest, which are in the middle, they never come so strike stroke, but after the front, and reare, are broken. In another place hee writeth to this effect: your Contubernies (the souldiers that cabin together) you shall order according to five men, or to ten, or to foure,*

a Xenop. Cyrop.  
lib. 1. 11. D

b Leo cap. 4. §. 7. 12.

c Leo cap. 4. §. 12.

d Leo cap. 4. §. 12.



or to eight, or to sixteen, as you shall find most convenient, that being bound one to another with mutuall acquaintance, they may fight one for another in battaile and bee more valiant against the enemy. But you shall doe more wisely, if when you are to joine, you place brothers by brothers, & friends by friends. For when hee, that fighteth, hath an entierly beloved friend standing next behind him, hee must of necessity hazard himself with more egerneesse for his friends sake. And the other being ashamed not to requite one, that sustaines such danger in his behalfe, will hardly bee brought to forsake his friend so well deseruing, and first betake himselfe to his feete. *The same is the advise of Onosander, and was much practised in auncient time. The Lochos Hieros, or Holy-band, of the Thebans* (whereof I spake before) consisted all of friends, that had bound themselves one to another in friendship. With this Holy-band <sup>a</sup> Pelopidas gave the first disgracefull overthrow to the Lacedaemonians, that ever they had. Of this band <sup>b</sup> Plutarch writeth, that it was never beaten untill the battaile of Cheronae, when Philip the father of Alexander vanquish't the Athenian, and Theban forces both together. After which battaile Philip surueying the dead bodies, and comming to the place, where these three hundred lay, all close mingled one with another, and strooken through with the Macedonian pikes, hee wondred greatly, and hearing that it was the band of louers, and beloued, wept, and said, evilly may they perish, that suspect any filthines in deede, or suffering, to haue been practised amongst such men. Cyrus the elder had his Homotimos nourished up together, and Alexander his Hetaitros, whose extraordinarie service appeared in all their battailes. <sup>c</sup> Diodorus Siculus writeth of Sesoosis the Egyptian King to this effect: at the birth of Sesoosis his father did a magnificent and royall deed. For gathering together all the children of Egypt, that were borne the same day, and setting over them some to nourish and governe them, hee gaue the same education, and institution, to them all, conceiving that they, that were brought vp together, & partakers of the same liberty, would become the best affected, and most assured fellow helpers in warre. This was the iudgement of Myris, the father of Sesoosis, King of Egypt, in providing assured assistance to his sonne for the conquering of the whole world, which by certaine blinde propheties was promised him. Now what little trust there is to bee given to men, that are not acquainted one with another, Pompey that great Captaine of the Romans sheweth in his epistle to Domitius: <sup>d</sup> For men, saith hee, are not quickly to be assembled hether by musters, and if wee had them, you are not ignorant how much they may be relyed vpon, being vnacquainted to fight against ould Legions. Yet hath Leo another mixture in his files. For hee would haue the ould, and new souldiers put together in one file. Least saith hee, the ould being by themselves alone, proue weak, and of small force, and the yong disorderly, having little experience. For the one, albeit ould, yet are well acquainted with service, the other albeit young, and valiant, yet are vnskillfull.

*For the Enomoties, dimerie, and file, see the figure.*

#### Joining of Files.

#### CHAP. VI.

<sup>1</sup> **J**oining of Files, is when one file is layed flank-wise to another, the Leader of the second file to the Leader of the first, and the follower of the second File-leader to the follower of the first, and so the rest. Every man that ranketh

is called *Parastates*, as for example the *Leader* of the second file, to the *Leader* of the first, and so their next *followers*, and the rest. As often then, as the second file, the third, the fourth, and so the rest are layd *flank-wise* to the first, it is named *Ioyning of files*.

Notes.

<sup>1</sup> **I**Oyning of files is] A file of it self will worke little effect against an enemy. For what can a man alone in front doe? Cyrus in <sup>a</sup> Xenophon wisheth, that where as the Egyptians stood a hundred in depth, they had beene in depth a thousand, for soe, saith hee, wee should haue the fewer hands to fight against. The ranke bringeth the multitude of hands to fight. And it is held, that the more hands are with conueniency brought to fight, the more is his advantage, that bringeth them. This is done by ioyning files together, out of which ioyning, ranks spring, and ranks the more they increase, and extend themselves in length, the more hands are ready to encounter the enemy. Now, as it was said in the former chapter, that files consisted of leaders, and followers, from the first to the last. So is it in this chapter saide, that ranks consist of side men from one end of the length of the Phalange to the other: Fewe, or many men, placed side to side in a right line make a ranke; as in two, or three files ioyned together, there are sixteen ranks of two, or three men in a ranke. And the two or three file-leaders make the first ranke, their followers the next, and soe the rest vntill you come to the sixteenth. The like falleth out in more files. <sup>b</sup> Virbicius saith, that the file-leaders make the front (as they terme it) of the Phalange, which they call also the first ranke. And further, hee saith, they, that runne in an even line betwixt the two wings, the right, and the left, are said to bee *Parastatai*, or side-men. Likewise: the last ranke is called *Oura*, or the reare, and the commander *Ouragos*, the bringer-up. So Virbicius agreeing with Ælian. Now, out of these two chapters, is a cleare distinction of the names of souldiers, that by reason of their posture, or place, in battaile make the diuersitie of files, and ranks. They, that make files are *Protostatai*, first-standers, & *Epistatai*, after-standers; which are by vs commonly called Leaders, and followers. For these two saith Ælian make the file from the beginning to the end. *Parastatai* side-standers, or, as wee terme them, side-men, make the ranks. And if you measure the length of the Phalange, you doe it by number of men in the ranke, if the depth by number of men in the file.

<sup>a</sup> Xenophon Cyrop.  
lib. 2. 167.

<sup>b</sup> Etymol. magna  
in the word Stat.  
100.

Of a Phalange, the length, and depth thereof: of rankings, and stūges; the diuision of the Phalange into wings: the place of the armed foote, of the light-armed, and of the Horse.

CHAP. VII.

**T**HE whole bodie of the multitude of files is termed a *Phalange*: whose length is the first ranke of file-leaders, and is named, the front, the face, the edge of the battaile, the ranke, the mouth, the Commanders, the fore-standers, & the head of the files.

As much of the *Phalange*, as stretcheth backward from the front to the reare, is named the depth: The bearing straight forth of side-men in length, whether

ther they bee *Leaders*, or *followers*, is *ranking*. And the standing of *Leaders* and *followers* directlie in a line in depth, is *siling*.

A *Phalange* is divided into two whole partes beginning at the middle section of the *front*, and houlding on cleane through to the vttermost parte of the depth; whereof the one half is called the *right wing*, and *head*, the other half the *left wing*, and *tail*. The two fold section it self, that divideth the length, hath the name of the *Navell*, and the *Mouth*. The *Light-armed* are placed after the *Phalange* of the *Armed*, and behind them the *Horse*. Yet if occasion require, both *light-armed*, and *Horse* are otherwise disposed, as after in this discourse will appeare.

## Notes.

THE whole body of multitude of files is termed a *Phalange*] *Joining of files makes ranks, and a sufficient number of files, and ranks together, make a body, which is called a Phalange. For that name is given to any entire body of an indifferently greateste, compacted, and united for fight. Hefychius deriveth the originall of the word Apo tou pelas allelois inai, from the standing of the souldiers in battaile neere one to another. Suidas in the same sence, albeit hee differ a little in words, saith, the Phalanges are so called apo tou pelafai anchi, of approaching one neere to another. The great Etymologicon goeth yet a little further, and saith, that Phalanges are as it were Palanges para to pelas kai eggys cinai, as it were Pelangys. These are the coniectures about the originall of the name. Which of them is truest, is not greatly to the purpose. It is enough to understand, in what sence the word Phalange is commonly taken amongst Tactics writers, who, as I said, in a generall signification call any great body of armed gathered together, and united for fight, a Phalange. Soe Caesar nameth the battaile of the Helvetians, into which they cast themselves, when they fought against him, and likewise the battaile of Ariovistus, a Phalange. So speaketh Xenophon of the Plerium, or square hollow battaile, into which the Gracians, that went with Cyrus the younger into Persia, fashioned themselves at their returne out of Persia. And the same Xenophon saith, the horse of the Gracians, when they were to encounter the Persians, ordered themselves foure in depth, in forme of a Phalange. And Arrian, that the Persians at the River Granicus were ordered in a long Phalange, and Xenophon againe discoursing how Iphicrates exercised his nanie, when hee expected to fight with the Lacedamonians, saith, hee sometimes lead in a wing (that is in a large depth) sometimes in forme of a Phalange, in a broad front. The first inventor of the Phalange is thought to bee Pan the generall of Bacchus his armie. Polyanius saith: Pan was the commander of Bacchus his armie. This man was the first that invented the order of a battaile, called it a Phalange, and parted it into the Right, and left wing. For which cause Poets saine, that Pan carrieth two hornes vpon his head. Besides hee was the first, that by slyght, and cunning cast a feare vpon his enemies. For when Bacchus, incamping in a hollow forest, was advertized by his spies, that an infinite number of enemies were lodged one the further side, hee began to be affraide. But not Pan: who commanded the same night the armie of Bacchus to giue as great a shout as they could. The Rocks and hollownesse of the forest rendered it againe double to the enemy, & made shewe of a greater armie, then Bacchus had. Where with the enemy falling into a feare fled forthwith. In honour of this stratagem well saine, that Echo is Pans lone: & the causeless night-fears, which fall vpon Armies, were attributed to Pan.*

So

So saith Polyenus about the inventor of the Phalange. The number of the Phalange is not alwayes one. It may consist of ten thousand, twenty five thousand, or as many, as you list. Antigonus the King of Macedonia had his Phalange of ten thousand. Ptolomaeus King of Egypt, of twenty five thousand. The ten thousand Gracians that went with Cyrus into Persia are called a Phalange. What number the Helvetians, and Ariovistus, had in their Phalange, is not preciselie set downe by Caesar. Yet it seemeth by Caesar, that the most parte of the fighting multitude of the Helvetians cast themselves into a Phalange; and those of Ariovistus likewise. But Aelians Phalange is refreined to a certaine number, as the next following Chapter will teach.

2 The length whereof] The length of the Phalange is to bee accounted by the ranke not by the file. The file is but sixteen men deep. The ranke from the point of one wing to the pointe of the other coneyneth a thousand, and twenty foure men in Aelians Phalange. So that the files being short in comparison of the ranks, it is reason, that the length of the Phalange bee measured according to the ranke, not to the file. Suidas agreeth with Aelian saying, that the length of the Phalange is the first Syntagma (the first ranke) of file-leaders, which is ordered in a right line, stretching from one wing to another, and is called the face, and the mouth, and the front, & the edge, and the first-filing, and the first standers of the battaile. The next rowe, lying Parallel to this, is called the second ranke, and the third, the third ranke, and soe the rest. The length is termed in Greeke Mecos, to which is opposed the depth, which is named Bathos. Neither is there in true account any other dimensions in a Phalange, besides the length, and the depth, which are in this chapter mentioned by Aelian. Other names are given in Greeke writers sometimes, but they signifie either the one, or the other.

3 Is named the depth] As the length runneth along by front from one wing to another, so the depth beareth backward from the front to the reare. The depth is properly called Bathos, as I said. And Bathera Phalanx, is a deepe Phalange. And Arrian saith, Alexander ordered his Phalange as Bathos, in depth. And Polybius, that the Romans made their battaile much shorter then before, but much deeper, Bathyteran. And as it is called Bathos, for the most part, so is it by Leo called also Pachos. For the depth of a file is by him termed depth, or thickness, Bathos, or Pachos, in two severall chapters of his Tactics; not in respect of the file it self, which is no more then a long line, as it were, and carrieth neither thickness nor breadth, but in respect of the Phalange, the depth whereof is measured by the file. And in the fourth, the twelfth, and fourteenth chapters hee termeth the depth of the Phalange it self (thickness) Pachos alone with out adding Bathos; shewing thereby, that Pachos also signifieth the dimension of the Phalange from the front to the reare. But where some are of opinion, that Platos, breadth, ought to bee read in those places in steed of Pachos, thickness, they perswade mee not to bee of their mind. For Aelian himselfe giueth an Attenuation, or Thinning, (which hee calleth Leptysmos) to the Phalange: and that cannot bee understood, unless there were in it a kind of thickness before. And to make it more plaine, hee saith, that this Leptysmos is, when the depth of the Phalange is gathered up and from sixteen men it becometh a lesse number. So that the thickness of the Phalange is the full sixteen, which is also the depth, and making of it Thinner is to lessen the depth. To a Place Platos is firstly attributed, a Place being onely superficies, which consisteth of longitude and latitude. So Polianus speaking of a valley, wherein an ambush was layde to entrap Alexander, saith, the length stretched farre out, but the breadth, Platos, was narrowed to four, which is the length of the Phalange. The name of Platos is likewise given to a place by Polybius. But to say the

E

truth

- a Caesar de bell. Gall lib. 1.  
b Xenoph. de exp. Cyri lib. 3. par. 8.  
c Xenoph. hist. grec. li. 3. par. 1.  
d Arrian lib. 1.  
e Xenoph. hist. grec. li. 1. par. 1.  
f Polybius lib. 1. par. 1.

- a Polyb. lib. 1. par. 1.  
b Polyb. lib. 1. par. 1.  
c Polyb. lib. 1. par. 1.  
d Arrian lib. 1. par. 1.  
e Suidas in Mechos.  
f Diad. Sicil. 258.  
g Arrian lib. 1. par. 1.  
h Polyb. lib. 1. par. 1.  
i Leo lib. 1. par. 1.  
k Arrian lib. 1. par. 1.  
l Polyb. lib. 1. par. 1.  
m Polyb. lib. 1. par. 1.

a Leo ca. 7. § 1.

truth Platos in a Phalange rather signifieth the length, then the depth, as appeareth by *Alian* after in the foure and fourty chapter. And *Leo* calleth the front of the Phalange Platos, and when hee would haue the front enlarged, or doubled, hee giueth this word of direction Plátynon pròs tà amphótera mēre, enlarge the front on both sides.

4 The right wing] That which in the English tongue is called a wing, is termed in Greeke *Keras* a horn. Wee in our warres of auncient time diuided our armies into three parts, The vantage, the battaile, and the reare-ward: and, when wee came to fight, set them for the most parte in an even front, the battaile in the midst, on the right hand, the vantage, which was called the right wing, on the left, the reare-ward which was called the left-wing. Properly enough for our embattailing. For the battaile is, as it were, the body, and the vantage-ward, and reare-ward, are the wings, which in a manner sticke out from the body, and where by the body is supported: that, that wee call wings, the Grecians, and Romans called horns in the battaile. The word *Keras* signifieth a point bearing out from the height, or ends, of any thing. It is used for the toppe of Rocks, and for promontories, and such like; And in a Phalange it properly signifieth the two points (the right and the left) of the wings. The English word wing I am faine to retaine, because it is familiar, and in use. *Alian* here will haue the wings to stretche out from the middle section to either point (the right and left) of the Phalange: vnder which appellation must fall to the right wing the whole space, that beginneth at the middle intervall, and runneth along to the corner of the battaile on the right hand, to the left, all that is comprehended betwixt the same space, and the left corner of the battaile.

5 The twofold section] In Greeke it is named *Dichotomia*: because it parteth, and diuideth the Phalange into two even parts, beginning at the front, and stretching out to the reare. And *Alian* in the tenth chapter of this booke nameth it Apotome. But here hee speaketh of no more intervalls, or partitions, of the Phalange, then of this one in the midst. I would thinke there should be more. *Orosius* saith: let there be certaine intervalls in your battaile, that if your enemy advance, your light-armed after they haue spent their missive weapons, and before the Phalanges joyne, may retire leasurably in the intervalls, and without disorder come behinde to the reare. For it is not safe for them in retiring to fetch a compass about the whole armie, or to turne in againe on the outside of the wing. For the enemy, halting to come to hands, would easily prevent, and intercept, them in the midst; so that they neither should be able to breake through the armed, already closed for fight, and falling vpon their owne weapons, they must needs disorder their owne people, every man after other seeking to finde a way through them to escape the danger hee is in. Thus much *Orosius*, from whom wee may learne, both that shere ought to be more sections in the Phalange, then one, and that the institution of them had this cheefe end, to receiue the light-armed in their spaces, after they had skirmished with the enemy, and were by them forced to retire. I may adde, that *Alian* placing the light-armed in the reare of the Phalange if you giue but one section vnto it, it will be as hard for them, to advance, and sune, before the front, as it will be to retreat after their service done. It seemeth, that *Leo* giueth three intervalls to the Phalange of the auncient Tacticks. He saith: they opposed the bodies of the armed against the enemy, and diuided them into foure parts, the right, and left, and the middle-right, and middle-left parte. Making so many parts, the parts must be distinguished (as I collect) by intervalls, which ought to be one

after

after the first body of the right-wing, another after the second, which is the middle section, the third after the third. And this Third section is bounded with the fourth body, which maketh the point of the left-wing. For if the Phalange were whole, and entire, without more intervalls then one, how could there be foure parts? For esteeming them by Phalangarchies, without leaving spaces betweene, it could not be said, there were but foure parts of the Phalange, considering, that as well the Merarchies, Chiliarchies, Pentecostarchies, Syntagmates, are parts of it, as the Phalangarchies. But being distinguished by partition of intervalls, the foure Phalangarchies become foure parts, namely the right, left, middle-right and middle-left: as *Leo* heere termeth them. The same *Leo* speaketh after more plainly, enioyning his generall to separate, and disioyne Diachorizein the whole number of his armie into foure parts. For, as *Choris* signifieth a part or severed, so Diachorizo, being deriued from it, signifieth to put asunder, or sette apart. *Suidas* is yet a little more cleare. A Phalangarchie, saith he, is two Merarchies of foure thousand and ninty six men. This as some saye is the section, Apotome, of the wing, as other, it is a *Meros*. Of auncient time it was called *Strategia*, and the commander *Strategos*, but now hee is termed *Phalangarchia*. *Suidas* maketh the wing to haue a partition or section, and saith, some call a Phalangarchie by the name of this section. Before wee heard out of *Alian*, that the wing (right or left) did stretche out from the middle section to the outward most point of the battaile on either side. And as the middle section diuideth the Phalange in two parts, which are called wings, so this section (spoken of by *Suidas*) being in the midst of the wing diuideth the wing into two parts. To call a Phalangarchie (which is a body consisting of foure thousand and ninty six men) a section, is, I confesse, an vnproper speech, but tolerable notwithstanding, considering that the whole foure-folde Phalange is composed of the foure Phalangarchies, and that the section of the right-wing beginneth at the left hand file, or inward point of the right hand Phalangarchie, and endeth at the right hand file of the second Phalangarchie. And wee are not to expect the same exactnesse of speech from souldiers, that is common to men skillfull in the liberal sciences. Souldiers, that profess action, haue their end, if they be vnderstood of those, they command. Articles are censured, that close not the precepts of their art with elegant, fit, and exact termes. Seeing then the beginning of the section of the wing is at the flanke of the first Phalangarchie on either side of the Phalange, wee may after a sort terme the Phalangarchie a section of the wing, because it boundeth the section. At least by this place of *Suidas* wee may gather, that there was an intervall in either wing, which in reason ought to be in the midst of the wing, and to lye betwixt the two Phalangarchies. For so many there are in one wing. *Polybius* telleth of *Philopamen*, that, fighting against *Machanidas* the Tyrant of Lacedaemon, after hee had placed the light-armed, the Lanciers, and Illyrians tomyth in one front, hee added in the same right line the Phalange distinguished into bodies according to Merarchies and diuided by severall distances. I translate *Spierodon* distinguished into bodies, because *Speira* signifieth a militarie body amongst the Grecians, and is by the Grecians, that wrote the Roman historie, used sometime for a Legion, and sometime for a Cohort. And it seemeth that *Spierodon* is heere by *Polybius* put in the same sense that *Eis Speiran* is by *Plutarch*: who mentioning the reformation touching affaires militarie, which the same *Philopamen* brought in amongst the Achaians, writeth thus: their manner and forme of embattailing was not vjually parcelled out *Eis Speiran*, that is (as I interpret it) in severall bodies, but vjing a Phalange,

E 2

Phalange,

b *Suidas* in the word Phalangarchie.b *Orosius* ca. 7. § 1.b *Leo* ca. 7. § 1.c *Polybius*, lib. 2. § 11. D.d *Plutarch* in *Philopamen*.

Phalange, which had neither protension of pikes, nor closing of targets in front (as the Macedonian manner is) they were easily foiled, and broken, by the enemy. The meaning of Plutarch is (as I conceive) that the Achaeans in former times used to order their Phalange in a continued length without intervalls which Philopamen reformed, and taught them to make divisions by intervalls; And the practise of Philopamen is the best interpreter of his owne counsell to the Achaeans. This practise Polybius setteth downe to bee the division of his Phalange Kata tele speiredon en diactemasi into bodies distinguished by intervalls according to Merarchies. Polybius also, to shewe, what bodies they were, useth the word Tele, which I translate Merarchies, having my warrant out of <sup>a</sup> *Alian*: who saith a Merarchie consisteth of two Chiliarchies, and containeth two thousand and fourty eight men, and a hundred and twenty foure files; and addeth, that it is of some called a Telos, and the leader a Telarch. A man may doubt seeing Philopamen made an intervall betwixt every Merarchie, whether hee made seven divisions, or no: For in *Alians* Phalange there are eight Merarchies, betwixt every of which if a distance were, there must needs arise seven intervalls. To cleare this doubt wee must understand, that the Phalanges of the Gracians were not alwaies of the same number, as I noted before. *Alians*, and the Macedonian Phalange, consisted of sixteen thousand and odde. Antigonus had but ten thousand. Demetrius eleven thousand. Other had more, the Lacedamonians lesse, and likewise the Gracians for the most part. And it seemeth, the Phalange of Philopamen was no more, then eight thousand, and odde, in which number there are but foure Merarchies. As *Alians* Phalange comprehending sixteen thousand and odde, wherein are foure Phalangarchies, hath likewise three divisions by Phalangarchies. And yet in this Phalange of Philopamen, if you account the file to haue but eight men (as the most Gracians used in their files to haue) these foure Merarchies will possess as much ground in front, as the Phalangarchies of *Alians* Phalange doe, the file being sixteen. Neither is it new to figure out the bodies greater, or lesse, according to the number of the Phalange. <sup>b</sup> Leo commandeth his Generall, when the number will not reach to sixteen thousand (the number of the old Phalange) to bould notwithstanding sixteen men in a file, and to divide his Phalange into foure equall parts by intervalls, excepting some few, which hee would haue reserved for other uses. To conclude *Alian* him self seemeth to acknowledge more sections, then one, when in the tenth Chapter of this booke hee speaketh of the middle section msc apotome. For this word middle being a relative, can not bee understood with out two other at least, which are placed on either side. And all the figures, that I haue seene, of a fourefold Phalange allowe three sections, and no more, that is to saie, one in the middlest, and the other two in the wings. What the distance and dimension of these sections ought to bee, I finde not set downe. But, if I might haue leaue to coniecture, I would thinke, they ought to bee large enough for a troupe of horse, framed wedge-wise, after the Macedonian manner, to passe through; the last ranke whereof being fifteen (as appeareth in the twenty chapter of this booke) and the horse placed in the reare of the light-armed it is needfull, if upon any occasion they were to bee drawn through to serue in the front, the distance of the section should bee sufficient to giue them passage with out disorder. And I am the rather confirmed in this opinion, because I see the intervalls betwixt the Roman maniples so proportioned, that the Principes might passe through those of the Hastati, and the Triarii through those of the Principes. But I proportioned out the intervalls to the horse, not to the light-armed, for that the light-armed way bee divided into severall bodies without inconvenience, but any breaking of the horse-

<sup>a</sup> *Alian* helio-  
cap. 9.

<sup>b</sup> Leo esp. 4.  
§. 1. 44 45.

horse wedge breedeth a confusion in the whole troupe. Yet where a troupe of horse may finde way, there may a Centurie, or Colours, of light-armed finde also way.

6 The light-armed are placed after] <sup>a</sup> The light-armed were diversly <sup>a</sup> *Ælian* cap. 41 placed, sometimes before the front of the Phalange, which kind of placing is afterward called Prataxis, sometimes on the wings, and it is called Hypotaxis, sometimes betwixt the files of the armed fronting in a right line with them, and it was called En-taxis, sometimes in the reare after the Phalange, which was called Epitaxis. All these are spoken of by *Ælian* hereafter in this booke. <sup>b</sup> There is another kinde <sup>b</sup> *Ælian* cap. 42 of placing the light-armed, when they are throwne into the midst of the battaile, being hollowed for that, and other purposes. Heereof *Ælian* likewise treateth in this booke hereafter. And albeit the most vsuall embattailing of them hath bene in the wings, yet the bestowing in the reare according to *Ælians* minde hath also advantages. First it concealeth their number, which because they are shadowed with the spikes standing before, can hardly bee discerned. Then it is easie from the reare to drave them to any place of service without disorder, bee it before, on the wings, or behinde the reare. Further, it will not bee easie for the enemies horse to charge them, the armed standing before for a sure defence. Lastly, from the reare they shall bee able at all times to anoye the enemy, before the battaile ioyne, as soone as the battaile ioyne, and all the time of fight. Neither doth this manner of embattailing want examples of the old historie of the *Gracians*. <sup>c</sup> The embattailing of *Cyrus* the elders armie, in *Xenophon*, hath the light-armed <sup>c</sup> *Xenop* *Cyrus* lib. 6. 167. 3. in the reare. I will set downe the effect of *Cyrus* words at large because they containe the ordering of an armie to fight according to the iudgement of *Xenophon*. *Cyrus* then being to trye a battaile with *Crasus* thus directeth his Commanders: you, saith hee, *Araſpes* take your place in the right wing, as you now doe, and you the other *Myriarches*, as you are accustomed. For when the fight is once a foote, noe Chariot may change horses; and command the *Taxiarches*, and file-leaders, to order their files every one divided in two parts Phalange-wise, that is each half fronting one with another in a right line. A file containeth foure an twenty men. Then saide one of the *Myriarches*, doe you thinke Sir, that wee shall bee able, in this order, to encounter so deepe a Phalange, as the enemies? *Cyrus* answered, the Phalanges that are deeper, then may with their armes reach the enemy, are they fitt thinke you either to annoye the enemy, or profite their frindes? For my part I could wish those, that are ranged 100. in depth, to bee in depth a thousand. For so should wee haue the fewer to fight with all. The number, that I giue for the depth of the Phalange, I doubt not, but will entirely serue for vse, and maintaine a joynt fight in every part. The *Darters* I will place after the armed, and after the darters the *Archers*. For who will sett them in front, that confesse themselves vnable to maintaine a fight hand to hand? Howe then will they hould their grownde, if they bee sett before the armed: but being in the reare, some with darts, other with arrows, sent over the heads of the armed, will greatly endamage the enemy. And it is cleere, that wherewithall soever an enemy is endamaged, with the same a mans owne side is eased, and relieved. You therefore order your selues, as I haue appointed. As for the captaines of the *Targetiers* I will haue them, and their files, stand likewise next the armed in the Reare, and after them the *Archers*. And you the chiefe Commander of the Reare enjoyne

enjoyne the other reare Commanders every man to haue an eye to those vn- der him, that they doe their duties. And let them sharply threaten the neg- ligent, and in case any man treasonably forsake his place, punish him with death. For it is the worke of Commanders both with word, and deed, to en- courage those, they command, & to make the cowards more afraide of them, then of the enemy. This is your charge, but you Euphratas, that command over the Engines, see that the beasts, that drawe the Engines, and Turrets, followe the Phalange as neere, as may bee. And you Daouchus, that haue the charge of the baggage, come with your manye next after the Turrets, and let your Sericants feuerely punish them, that haue to much before or come to slowly after. And you Carduchus, that rule the wagons, wherein the wo- men are, order them next the baggage. For all these, comming in the reare, will both breede an opinion of multitude, and giue vs meanes to lay an am- bush, and will force the enemy, purposing to encompass vs, to fetch a larger compasse; which the larger it is, soe much the weaker must hee be. And you Artabafus, and Artagerfas, each of you leade next after these, the 1000. foote you commande a piece. And you Phranuchus, and Asiadatas, order the Chi- liarchies of horse you commande not with the Phalange, but set them by themselves apart behind the wagons; and when you haue done it, repaire to vs with the rest of the commanders. But you are to bee in a readinesse, as if you were first to fight. And you the commanders of the Camel-riders place your selues after the wagons, and doe what Artagerfas shall bidde you. And you the Commanders of the Chariots, after lotts are cast, Iet him, whose lotte it is, range himself, and his 100. Chariots, before the Phalange; the other two hundred, one of them is to follow, the Phalange on the right side, wing-wife, the other on the left. So farre Cyrus. I haue rehearsed the words as large, prin- cipally to shewe that the light-armed in ancient time were placed sometimes behinde the Phalange; and yet further also, to represent the manner of embattailing an armie which was then vsuall. For heere haue you set downe the place of the Myriarches, & of the other commanders, which was in front, then the place of the pikes, of the light-armed, of the reare commanders, of the Engines, of the baggage, of the wagons, wherein the women were, of the gards for the baggage, both horse, and foote, of the Camels, and of the Cha- riots. And albeit many of these particulars agree not with our manner at this day (for wee haue neither Engines, nor Camels, nor Chariots, nor slings, nor darts, nor arrows) yet is the reason of warre alike in all, and in our placing also the fitnessse of seruice prin- cipally to bee respected. The place of the horse is heere omitted by Xenophon, which may be supplied out of the seventh booke, where Chrysanthas Generall of the horse is saide to stand on the right wing of the Phalange with half the horse, Hytaspas on the left with the other half. But to returne to the placing of the light-armed, the same Xenophon testifieth, that it was the Egyptian manner to order their light-armed behinde, & that in the battaile betwixt Cyrus, and Crasus, the Egyptian archers, and darters, were with drawne sword compelled by the reare-commanders to shoote, and cast their darts. T h r a s y b u l u s in his fight against the thirty Tyrants set his armed in front, and in the reare his targetiers, and darters, without armor, and those that cast stones. And it seemeth by the words of T h r a s y b u l u s to his owne side, that the Tyrants did the like. The Tyrants, faith hee, haue brought vs to a place, in which by reason of the steep- nesse they must ascend, and can neither cast stone, nor dart, over the heads of their owne people, that are embattailed before. Where wee contrarywise, whether wee throwe jauelins, or darts, or stones, shall easily reache, & wound many

a Xenoph. Cyrop.  
lib. 7. 172. C. &  
175. G.

b Xenod. Cyrop.  
lib. 7. 179. B.

c Xenoph. Hist.  
græc. lib. 2. 472. D.

d Xenoph. Hist.  
græc. lib. 2. 471. C.

many of them. The stones and darts of the light-armed were to flye over the front of the battaile, and that could not bee unless the light-armed were placed behinde; I will add one example onely out of Plutarch to shew the seruice of the light-armed in the reare. Plutarch discoursing of the battaile fought betwixt Sylla, and Archelaus, the Gene- rall of Mithridates, at Cheronea, hath thus: Afterwards the foote forces came to joyne, the Barbarians holding out, and charging their long pikes, and end- eavouring with locking their targets close together, to mainteine the order, and closenes of their Phalange: The Romans on the other side, casting away their darts, and drawing their swords: putte by the enemies pikes in choler, to the end they might come quickly vp to them. For they espied, opposed a- gainst them in front 15000. of the enemies slaues, that were enfranchised by Proclamation of the Kinges generalls: & enrolled amongst the armed. And when the Roman Armed could hardly breake them, by reason of their depth, and fast knitting together; and of their bouldnes in daring (con- trary to the nature of slaues) to abide the danger of the encounter, the ar- rowes, and darts cast in abundance from the Reare, made them shewe their backs, and fall in a route. Wee finde heere, that the light-armed from the reare effected that, which the Armed could not. These slaues endured the shooke; and could not bee broken by the armed, and yet were defeated with Arrows, and darts, from the Reare: Nowe for the distance that should bee betwixt the bodies of the light-armed, and betwixt them, and the reare of the armed, Ælian saith nothing: I make noe doubt, but there ought to bee as great (if not greater) as in the sections of the armed. For wee must understand, that the sections, that serued to sever the Phalangarchies one from another, must runne through the light-armed in depth to the reare. And by them are the Epixenagies to bee diuided a sunder, as the Phalangarchies are: with Epixenagies answer the Phalangarchies for number of files, albeit not in number of men. Likewise there ought to bee, a greater space in ranke, and file, then the armed had. For the hand- ling of misseue weapons, require more liberty of place, then the managing of a pike or sword. A dart can not bee sent for cible without running two, or three, steppes in the delivery of it. A sling being throwne, and circled about the head, before the stone, or bullet, can bee forced out to any purpose, will not suffer a neere stander by. In bowes, and arrows, is the like reason, if they be vsed as they ought. Besides the light-armed, in their fight are tied to noe certainty of order, or ground, but fight disperedly: Soe that the more ground they haue, the fitter they are for seruice. In which respect a large interuall crosswise betwixt the armed, and them, should serue to purpose: it hauing liberty for their motion forward, and backward, as occasion should require.

7. And behinde the horse: I haue not read in any greek historye, that the horse-men in a set battell, haue beene ranged behinde the light-armed. The vsuall man- ner was to place them in the wings. Soe did Alexander before he passed the River Gra- nicus: soe as Iffos, soe at Gangamela: Soe did Antigonus, against Eumenes, and Eu- menes against Antigonus: Soe Ptolemee against Demetrius, and Demetrius against Pto- lemee: and in briefe all the Macedonians, and the Gracians, before the Macedonians were accounted of for matter of armes: unless some special cause moued an alteration. And, as I shewed out of Xenophon, before all their times. Cyrus albeit, hee set the light Armed in the reare, notwithstanding hee bestowed the horse in the wings: Alexander hauing passed the River Ister as long as hee marched in the corne lande, placed his horse behinde his Phalange, when hee entred the Champeigne, hee set them on the right wing: and lastly cast his Phalange into a Plesum: and ordered his horse before. In the Corne- land, they followed (for feare of an Ambush) In the Champeigne they marched on the

b Xenoph. 4. 4  
c Arrian lib. 1. 4  
d Plutarch lib. 1. 4  
e Arrian lib. 2. 35  
f Curt. lib. 3. 4  
g Arrian lib. 3. 5  
h Diod. Sicul. lib. 19. 116  
i Xenoph. Cyrop.  
lib. 7. 172. C. &  
175. G.  
j Arrian lib. 1. 4

right wing, because on the left, the Phalange was secured by the River; Before the Plaisum, that, being over-layde with the multitude of the enemy, they might have a sure retreat to the foote. The same Alexander, when hee was to fight the Battaille of Issos with

<sup>a</sup> Arrian lib. 7.  
26. 1.  
Strabo lib. 14.

Darius, as long as hee was in the streights, marshalled his horse after his foote. But in marching forward, coming to open ground, when he might give full length to his Phalange, hee placed his horse on both the wings. But the reason of setting them behinde was in the streightnes of the place: and hee being incertaine how neere the enemy lay, was loathe to put them to hazard, before they had liberty of ground to order themselves, and might have assistance of the foote. For otherwise it was an ordinarie manner in marching (as it is the manner also at this day) to dispose the horse half behinde, and half before.

<sup>b</sup> Xenoph. lib. 1.  
26. 1.  
Strabo lib. 14.

I will content my self with one example. When <sup>b</sup> Agesilaus retourning out of Asia, passed through Theffalie, the Theffalians, allies of the Thebans, followed him, and sought to endamage his armie to their uttermost. Hee had before disposed his march into a Plaisum, with the horse half in front, and half behinde, now when the Theffalians ceased not to molest him, by falling vpon his reare, hee sent to the reare all the horse of the vanguard, excepting those, that attended his person. Either party prepared them selves to fight. The Theffalians holding it not sure with Horse alone to incounter armed foote: Turning about their faces, began leisurely to retire, and the Lacedæmonians slowly to followe, Agesilaus, perceiving the error of both, sent the best of his horse, that were about him, commanding them to signifie to the rest, that they together should goe, and charge the Theffalians with all speede, and giue noe respite to them, to turne their faces. The Theffalians contrary to their expectation being hotly charged, some fled, other some turned about towards the enemy, other some endeavouring to turne, were surprised by their enemies, that by that time were come vp to their flankes. Nowe for the reason of Aliens placing the Horse in the reare, I haue noe more to say, then, that from thence they might bee soone draven to all places, front, flanke, or where soeuer the enemy is like to distresse vs. For it hath bene the foresight, of all generals to fashion their battails according to the figure the enemy hath before chosen. Examples are so plentifull, I neede not alleage many. Onely I will remember one latine story of placing horse in the reare. L. Lentulus, and L. Manlius Acidinus in Spaine being to fight with the Ilorgetes, and Ansetans, and other Spaniards, that had revolted from the Romans; in this very kinde of placing horse in the reare imitated, and gotte the advantage of, and defeated their enemies. <sup>c</sup> Livy hath the story, and writes thus in effect: The next day at the rising of the sonne the Spaniards being all armed, and set in order, shewed their battail about a mile from the Roman campe. The Ansetans were in the midst the Ilorgetes held the right winge, other obscure people of Spaine the left: Betwixt the wings, and the middle parte, they left broad intervals, to giue passage to their horse: (when time should bee) to send them through to charge. The Romans Embattailed after their wonted manner, Onely then imitated the enemy, in leaving open waies, for the horse betwixt the legions. Lentulus imagining that party, and none other, should haue vse of their horse, that first possessed these intervals of the aduerser battaille, commaunded Cornelius the Tribune to giue direction to the horsemen, presently to charge through, the foote on both sides came to blowes, and the fight was hard, when the Roman horsemen passing through the Spaces, and falling vpon the midst of their enemies at once disordered the battaille of foote and shut vp the wayes against the Spaniard horse, by which means, after noe long

fight,

fight, the enemy was vtterly defeated. Where Livy saith the Romans embattailed after their wonted manner, his meaning is they ordered them selves in Maniples, or Battalions, as wee now terme them (for that was their wont.) But when hee addeth, they imitated the enemy in leaving open waies for the horse, betwixt the legions. Wee must vnderstand that a legion was thus embattailed: <sup>a</sup> First they divided their legion in to thirty Maniples, ten of the Hastati: ten of the Principes, and ten of the Triarij. The ten maniples of the Hastati, they set first in an even front, leaving soe much distance, or void ground betwixt every Maniple, as a Maniple it self tooke up in standing. At a reasonable space behinde, were the Principes placed in as many maniples: but soe that their maniples stood directly behinde the void spaces of the Hastati. And against the bodies of the hastati, they left likewise spaces in the Principes to the end, the Hastati being overlaid, might retire within those spaces: or else themselves might advance against the enemy, through the intervalls of the Hastati. Lastly at a larger distance behinde these were the Triarij set, and divided with spaces betwixt every maniple, which spaces were great enough to receive the Principes, in case they retired also. Now the Horse being ordered in the reare after the Triarij, if from thence, they had gon to charge the Enemies front, through the spaces of the Triarij, they must of necessity, haue fallen vpon the Maniples of the Principes whoe were set directly against the intervalls or spaces.

To giue therefore free passage to their horse, the Roman Generals removed the maniples of the Principes from their ordinarie place, and bestowed them, in a right line, after the maniples of the Hastati, and made an open lane, (as it were) from the reare of their battell to the front. So that nothing hindered the horse, but they might freely fly vp to, and fall vpon the enemies front. And yet I take not Aliens meaning, to be, that the Horse set in the reare, should during the time of the fight still remaine there. For soe would noe great service bee had of them. But hee placed them there the rather to avoide confusion in ordering the foote. And thus after their embatteling, they might bee led from thence to any place, front or flanke, or where soeuer they might yeeld most vse. For in the fifteenth and twentieth chapter, he would haue both light armed, and horse soe placed, that they might answer all attempts of the enemy. And in his caution following, hee saith, if occasion require both horse and light armed, may bee otherwise placed. That they were usually placed in the wings, I haue before shewed. The examples declare they were placed in the reare sometimes:

Of placing in the front there are also examples. <sup>b</sup> The Lacedæmonians at the battaille of Leuctra against the Thebans placed their horse before their Phalange, and tried their fortune with them, and were beaten, before the foote ioyned: The Persians at the River Granicus, esteeming their Horse to bee their chiefest strength, opposed them vpon the banks against Alexander, that was to passe over, and embattailed their foote behinde the horse. And Alexander encountered them first with his Horse, before his foote could get over: One example more I will adde to shewe the reason, why Horse are sometimes placed before the front of the Phalange of foote. <sup>c</sup> Eumenes being to fight against Craterus and Neoptolemus, both great generals, that had served vnder Alexander in all his wars, ordered the fight thus: Because hee vnderstood, that their Army consisted of twenty thousand foote, the most parte Macedonians renowned for their valour, and skill in fight (in whom they set their greatest trust) and of more then two thousand horse; and knewe his owne foote, albeit they were as many in number, yet all to bee ramasses of diuerse kinds of people, and that his owne horse were five thousand, with exceeded the enemy both in number, and valor, hee determined to hazard the battaille vpon his horse, before the two Phalanges of foote should come together: Advancing therefore with his horse farre before his

his

<sup>a</sup> Livy Com. 5.  
lib. 9. 137. A.

The like was done by M. Valerius the Dictator against their own from Livy deat. lib. 19. 251. C. And by L. P. Sittius against the vammis. Liv. deat. lib. 30. 381. C. And by Sylla against A. Catulus from Liv. lib. 8. 45. 1.

<sup>b</sup> Xenoph. lib. 1.  
26. 1. 595. A.

<sup>c</sup> Plutarch in vita Alexand. Arrian lib. 1. 14. 18.

<sup>d</sup> Plutarch in vita Eumenes. Diob. Sioul. lib. 19. 649.



his foote, hee tooke the right wing himselſe, and gave the left to two ſtrangers, to Pharnabarus a Perſian ſonne of Artabazus, and to Phenix a Tenedian: Craterus ſtood in the right wing of his owne horſes; and placed Neoptolemus on the left. And ſeeing the enemies horſe comming forward, with greate fury charged them firſt, and fought brauely. But his horſe failing vnder him, hee fell to ground, and it being not knowne, whoe hee was by reaſon of the medly, and throng of thoſe, that gaue backe, and fled; hee was trampled vnder foote, and ended his life after a ſtrange manner. By his death the enemy tooke courage, and encompassing their aduerſaries on all ſides, made a great ſlaughter, and the right wing, after this manner, with might overpreſſed, and put to the worſt, was faine to fly for ſuccour to the Phalange of foote. In the left wing Neoptolemus ſtoode directly againſt Eumenes, and the mutual ſight of eche bredde a greate emulation betwixt the *generalls*, and a ſeruent deſire to come to hands. And being eaſely knowne, both by their horſe, and other marks, they ſlew one vpon another; and out of their ſingle fight made away to a conſequent victorie. And firſt they aſſailed one another with ſwords, and after fell into an vnlooked for, and wonderfull Monomachy, for being tranſported with anger, and mutual hatred, quitting the raines of their bridles, with their left hands they eache ſeized, and tooke hold vpon the body of other, which hapening, and the horſe continuing their careare, and ſpringing from vnder them, they both fell to the ground, neither of them could wele ariſe by reaſon of the ſuddaine, & violent fall, and of the heavines of their armor. Yet Eumenes got vp firſt, and prevented Neoptolemus, ſtricking him on the ham. The wounde was wide, and his ſtrength of footing thereby failed, & ſoe lay as one, that had noe vſe of his legge, being not able to raiſe himſelf becauſe of the hurt: notwithstanding, courage overcoming the weaknes of his body, hee liſt vp himſelfe vpon his knees, and hurt his aduerſarie in the arme, and thighes, giving him three wounds. But none of the wounds were mortall, and they being yet warme, Eumenes with a ſecond blowe hitting his necke, ſlew Neoptolemus outright. Whileſt theſe things were a doing theret of the horſe fell together. Many were ſlaine on either ſide: ſome therefore falling, other being wounded, at the firſt the daunger was equall. Afterward, when the death of Neoptolemus was openly knowne, and that the other wing was put to flight, euery one ſhifted for himſelfe, & made towards the Phalange of foote, as to a ſtrong wall of defence to ſaue himſelfe. This was the iſſue of the battaile. Wherein Eumenes, placing his horſe before his foote, becauſe hee held them his ſtrength, and with the ſtriking the hazard of the day, ſhewed himſelf, both in counsell, and action, a greate general. And Craterus on the contrary ſide, albeit highly eſteemed amongſt the Macedonians, as one, that had with great ſufficiency ſerued Alexander in all his warres, yet failed in iudgement, in that hee choſe rather with his horſe to encounter the ſtronger parte of his enemies forces, then with his Macedonian Phalange (which Eumenes himſelf feared) to trie his fortune. For as it is a pointe of forecaſt to knowe a mans owne advantage, and vſe it: Soe it is not leſſe iudgement, to knowe wherein the enemy is ſtronger, and a void ye. Eumenes did both; for hee vſed his owne horſe, which were his ſtrength, and brought to paſſe, that Craterus his Phalange did him noe good, in as much as they never came to fight. Craterus failed in both, in that hee neither brought his Phalange to fight, nor yet provided ſufficientlie to encounter Eumenes horſe; which exceeded his in valour, and number; ſo appeares both, that horſe were placed before the front of the foote, and alſo the ſtorie gives the reaſon, why they were placed there.

of

of the number of the armed foote, of the light-armed,  
and of the Horſe.

## CHAP. VIII.

Now are wee to lay out, what number the *armed-foote*, the *light-armed*, and the *Horſe* ought to bee, and how particularly ordered, and how vpon occaſion the *Battaile* may ſpeedily be transformed into diuers ſhapes, & formes, and what diſcipline vſed for the motion of the ſeueral parts of it. Wee cannot with any probability ſet downe a precise number of forces to be leuied. For as much as euery man is to proportion his leuie according to the importance and qualitie of the warre in hand. This yet muſt not eſcape vs, that ſuch a number is to bee choſen, as will ſitt the diuers ſhapes, and tranſmutations of our *Troopes*. As if in caſe wee were to double, or to multiply, and manifoldly enlarge the length of the *Phalange*, or els to leſſen, and drawe it vp into a narrower roome. For this cauſe choiſe is made of a number, that may be, reparted into half continually, till you come to one. Hence is it, that moſt *Tactick* writers would haue a *Phalange* to conſiſt of ſixteen thouſand, three hundred, eightie, and foure armed foote, and of half ſo many *light-armed*, and of half as many *Horſe*, as *light-armed*. For 16384. may bee reparted continually into half, till you come to one. Therefore for prooſe, and Examples ſake this number is admitted. And where wee haue allotted ſixteen men to every *file*, the whole maſſe will ariſe to one thouſand, twenty, and foure files.

## Notes.

THE Chapter before ſpake of the parts and diſpoſition, of the *Phalange*, and of the place of the armed, the horſe, and *light-armed*. This treateth of the number that goeth to the *Phalange*. In choiſe of which number, *Alian* ſaith conſideration is not ſo much to bee had of multitude, as of ſines for ſervice. For ſuch a number as can be diſpoſed of for fight, is rather meanes of conſuſion, then of order without which no fight can be maintained: Therefore ſuch a number is to bee choſen as will ſerue.

1 The diuerſe ſhapes, and tranſmutations of our *Battaile*] Every motion in the battaile makes not a tranſmutation, or diuerſitie of ſhape. In turning of faced to the one hand or other there is not other ſhape of the *Phalange*, then was at firſt: As a man turning his face any way, the ſame proportion of lineaments remaineth that was in him before. Soe likewise in countermarch or wheeling after the Countermarche, or wheeling is done, every ſouldier if he keep his right diſtance, and remaine in file and ranke, hath the place hee had before: And ſoe no tranſfiguration of length or of depth followeth. The motion then, that *Alian* meanes to make *Tranſmutation*, are *Doublings*: For whether you enlarge the length, or depth, of your *Phalange*; you ſtraight induce another ſhape. A long fronted *Phalange*, and a *Herſe* differ much in forme. If you will make of the ordinarie *Phalange* a *herſe*, you are to double your files ſo often, as your iudgement ſhall ſee the length of your *herſe*. Then if from the *Herſe*, you would returne to the firſt ſhape, you are not to ceaſe doubling *Rancks*; till you haue gained that forme: likewise if of your ordinarie *Phalange*, you would make a long fronted *Phalange*, your *rancks* are to be doubled, and by continuing your doubling, you may drawe out what length you will. And

contrary

contrarywise, by due doubling your files againe, you come to the first forme: How much you double your Ranks, See much you take away from the depth of your Phalange; as on the other side, doubling of your files, diminisheth the length. For the purpose, your Phalange is sixteen deep, double your Ranks; the depth hath but eight men; double it once more, and it hath but foure. Soe is the Phalange consisting of foure ranks, & every ranke, hath foure thousand, and twenty six men in it: But the length is foure times as much as it was. In like manner doubling your files (which in Alians Phalange are a thousand, and twenty foure) the first doubling loseth five hundred, and twelve files and soe many remaine, the second seven hundred, and sixty eight, and two hundred fifty six remaine; and soe many men have you in a ranke. But where the Phalange was but sixteen deepe, nowe in the second doubling it is become sixty foure deep: If you please to reduce it to the first forme, two doublings of ranks will suffice. Here we must understand that doubling ranks, is not to make twice soe many as they were before, but to give twice so many men, to every ranke, as they had before by insertinge the even ranks into the odd, as the second into the first, and the fourth into the third, and the sixth into the fifth, and the eighth into the seventh, &c. The use of doubling I will shew in my notes upon the twenty nine chapter of this booke. Alian therefore would have his Phalange, of such a number as may be repeated continually into halfe, till you come to one; which number hee saith to bee sixteen thousand three hundred, and eighty foure. And yet ariseth out of the Multiplication of one by two soe still doubling the product, till you have made up the full number, of sixteen thousand, three hundred, and eighty foure. And as the Multiplication by two begett this number, soe it being divided by two continually, it may be reduced at last to one: Which is the thing, that Alian aymes at. For the numbers, that have not equal division by half, leave some supernumerary men in the Phalange: (Which) in doubling will disorder both files, and Ranks: Every man acquainted with the Rome countrie militarie exercise at this day, knoweth, that when there is an uneven number of files, the odde file supernumerary brings a difference, and cannot bee doubled in the sort as the rest are: As in five, seven, nine, eleven, severall bodies of files. Two, six, eight, ten, may well bee doubled, and become two, three, foure, five files a piece: but the fifth, seventh, ninth, eleventh, must bee severed from the rest of the doubled files; and serve to noe purpose, being not matchable in depth with the rest after theire doubling. The same reason is of ranks: Now when Alian saith, that this number in a Phalange may be divided by half and reduced at last to one, wee must with all understand, that the file of the Phalange in such division, ought to be either of eight, or sixteen men a piece. For noe number under eight, except foure, or two (which saith not the depth, of a Phalange) nor betwixt eight, and sixteen, is divisible by half, till you come to one. Noe nor above sixteen, except it bee produced out of the duplications of sixteen. A file of 12. comes nearest. And of that number was the file of Cyrus in Xenophon. Such a file notwithstanding by division of two staies at three, and can defend noe lower. Ten was the old file of the Gracians, and it was called Decas. And albeit after ward upon better consideration they enlarged the number of the file to twelve, yet they retained the name of Decas still. But ten receiveth but one division, and goeth downe ward noe further then five. The uneven numbers under sixteen cannot bee divided at all, Enles by fraction. As thirteen, which if you will divide by halfe, the quotient will bee six, and there remaineth an odde man over: of which number, if all the files of the Phalange should bee, you should have a thousand, two hundred, and sixty, which will receive noe more, then two doublings without a fraction. If then the files be above sixteen, and under thirty two, you cannot divide them continually by half, but you must saile of the manner, that Alian speaks of. As for the number of sixteen thousand, three hundred, and eighty foure, albeit of it self it is divisible by two till you come or descend

a Xenop. Cyrop.  
lib. 1. c. 12.

to 1, yet we must not consider it apart, as an abstract by it selfe, but as it numbeth, and is applied to the Phalange. In which respect, it giveth a 1024 files of 16 deepe, which files will still hold out the doubling, till you come to one file.

3 A Phalange to consist of 16384. Alian (out of the most Tactick writers as he professeth) will have the Phalange of sixteen thousand, three hundred, eighty and foure men. I have noted before that a Phalange may be more, or lesse, than this number. But I take this to be the number of the Macedonian Phalange. \* Appian seems to testifie a Appian. in  
with me, thus he saith: Antiochus whole army consisted of 70000 men. Of <sup>Syracus. 107. B.</sup>  
which the chiefeest strength was the Phalange of Macedonians, containing 16000 men, ordered according to the forme, that Philip and Alexander had before vied. He placed them in the middle, dividing the 16000, into 10 equall parts, in every of which parts was 50 men in front, and 32 in depth, and upon the flanks of every part 22. the shew of the Phalange was like a wall, of the Elephants like currents: <sup>b Liv. Decad.</sup>  
hitherto Appian. I have translated He Phalanx, He Macedonon according to the <sup>4. lib. 7. c. 141. A.</sup>  
word, the Phalange of the Macedonians, where the right meaning is, the Macedonian Phalange. For it consisted not of Macedonians, but was armed, and ordered, after the Macedonian manner. For how was it possible for Antiochus to wage, and have in his service 16000 Macedonians, being neuer himselfe King of Macedonia, and the King, that then was (namely Philip the sonne of Demetrius) was his enemy, and in league with the Romans? Besides Appian hath in expresse words: the Phalange was armed, and ordered, according to the institution of Philip and Alexander: whose manner Antiochus mought well reteine, considering he was lineally descended from Seleucus, the successor of Alexander in the kingdom of Asiria: And Seleucus had beene in the service of Alexander in the whole conquest of Persia. <sup>b Liv. Decad.</sup>  
Livy saith also, they were armed after the Macedonian manner. Whereby a man may inferre, they were no Macedonians: Hee speaking of the same battaile (which was the battell of Antiochus against L. Scipio) hath thus: The Kings army was mingled of fundry nations, and divers with diffimilitude of armes and aides. There were 16000 foote armed after the manner of the Macedonians. They were called Phalangites. This was the middle of the battell, and in front divided into 10 parts, which parts were distinguished by placing 2. Elephants in each intervall. The battell had 32 ranks in depth. It was the principall strength of the Kings forces, and both with the other shew, and also with the Elephants, which were eminent amongst the Armed only, brought with it great terror. Livy saith the 16000 were armed after the Macedonian manner and were called Phalangites; Appian, that there were 16000 ordered, and distributed according to the ordinance of Philip and Alexander. Livy, and Appian, both agree, that there was 10 parts, and every part secured with intervalls, and had 32 men in depth, which is the Macedonian file once doubled. Livy speaketh not of the number of the length of the Phalange. Appian saith plainly there were 50 in front, of every of the 10 parts, which amounts to 500: for 10 times 50 makes 500. Now if you multiply the length of the Phalange which is 500 by the depth, which is 32, you have the 16000, whereof Livy and Appian speake. But yet resteth a doubt, in the difference betwixt both these authors and Alian. Livy, and Appian both giving but 16000: Alian 16384 to the Macedonian Phalange. For Livy, we are not much to insist upon him, who being a Roman (we may probably conjecture) was halfe a stranger, in the Art Tacticke of the Gracians, and that, which he wrote, he had from others: perhaps no better skilled in the same Art than himselfe. Appian was a Gracian (for so those of Alexandria in Asiept accounted themselves, after Ptolomy the first had established that Crowne in his family) and as his historie sheweth, well acquainted with the order the Gracians held in embat-  
F  
tling

ling their armies, and therefore we may the better rely upon his authoritie. Who albeit hee first affirmed the Phalange was of the number of 16000, yet after in numbring the depth and length alone, he findeth 16000: and further expounding his owne meaning he sheweth, there were more upon the flanks of the ten parts, into which the Phalange was diuided. His words import: That Antiochus diuided his Phalange into 10 equal parts, giuing every part in front 50 men, in depth 32; which being multiplied together, make up the 16000. He addeth; And in the flanke of euery part he set 22. If the meaning be, he set 22 upon each flanke of euery part, the parts being 10, and the flanks 20, the number will arise to 440, where Elian alloweth no more than 384. But if 22 were added to one of the flanks of each diuision, which also being collectively taken are flanks in the plural number, we shall come short and finde no more than 220. Yet whether sense of both you admit, it is plaine, that Appian attributeth more, than 16 thousand, to that Macedonian Phalange. And it may be, there is an error in the number of the 22, and that it ought to be written 32. For if Antiochus had giuen 32, as he gave 22, to one flanke of euery part, and set 32 upon the uttermost flanks of euery wing to strengthen them, of the 12 times 32 had arisen the iust number of Elians Phalanges; which number is the fittest, for vse, and for diuision of the Phalange in all doublings. The armed foot then, according to Elian, ought to be, 16384. The light armed.

4. Halleso many] The armed amongst the Græcians, were accounted the strength of the field, which was the cause their number was greatest. For you shall not finde in their battailes for the most part, that the light armed amounted to halfe the number of the armed: The fact of Cyrus sheweth what account he made of light armed: \* Xenophon reporteth it thus: He led with him the Lydians, those whom he saw to take delight in Armes, horse, and chariots; and willingly doe, what they were commanded, he gaue armes to, of those whom he saw followed him against their wills, he gaue the horses to the Persians, that were his first companions in Armes. All that followed him vnarmed, he exercised to the sling, because he reckoned that weapon most seruile of all others. How much you increase the number of the light armed, so much you diminish the number of the armed, and by consequent so much weaken your field. \* For the light cannot maintaine any stable fight, but in case of danger they are forced either to shew a faire paire of heeles, or else retire to the armed for succor: Yet serueth they for many vses ioyned with the armed. And the proportion that Elian setteth downe, namely to haue halfe as many of them, as there are armed, standeth to good reason, & vse. The Romans notwithstanding, were more sparing in their light armed, & allowed not above the 4<sup>th</sup> part of them, or little more, to the armed. The Legion contained (saith \* Polybius) 4200 footmen. Of these they chose 600 Triarians, 1200 Iustati, 1200 Principes, (which come to 3000) and the rest Velites, which were 1200. And the Velites were the same in effect amongst the Romans, that the light armed amongst the Græcians, albeit their arming somewhat differed. Elian before shewed, that the Græcian light armed had no manner of defensive armour, but offensive only, as bowes, darts, or stones. \* Polybius describeth the Armes of the Velites to be a Sword, a Parma, (which is a small Target,) and darts; the sword a Spanish sword, the Target a little round Target, a foote and a halfe (for so Cafaubon correcteth Tripedon) in breadth; the darts in the steale 3 foote long, and a finger thicke; and the head almost a foote long. And \* Livy mentioning the skirmishes, that fell out betwixt the horsemen of King Philip of Macedonia, and Sulpitius the Roman Consul, compareth both their Armies together, telling that either party had their light armed ioyned to their horse, and that coming to fight, the Romans had the better. So (saith he) neither the Kings horse, vnaccustomed to a stedfast fight, were able to match the Roman

Roman horse, nor yet the foote skipping and leaping here and there, and almost halfe naked in their kinde of Armes, to be compared to the Roman Velites, hauing a Target, and a sword, and being armed sufficiently both to defend himselfe, and assaile his enemy. The number then of Elians light armed, ought to be 8192, and these being ranged behinde the armed 8 depe (so they are fittest for seruice) will make 1024 files, as many as the armed did.

5. Halfe as many horse, as &c.] The horse are in number 4096, and proportioned to the foote (comprehending the light armed) as 1. to 6. The armed foot, and light armed together make 24576: the horse 4096. And this was \* Alexanders proportion, a Diodor. Sicul. lib. 17. 177. when he moued first against Darius. For he had about 30000 foote, and 5000 horse, or not many more, as Diodorus saith. \* Iustini giues him 32000 foote, 4500 horse. b Iustini lib. 17. 639. Yet this number held not alwaies amongst the Macedonians themselves; I meane Alexanders Capitaines, that possessed his kingdomes after his death. The reason may be, that in Ciuill warres they made their levies, not as they would, but as they could. c In the battailie betwixt Eumenes, and Craterus, (I speake of that battell before) Craterus had 20000 foote, & 2000 horse; Eumenes had 20000 foote, & 5000 horse. Craterus the proportion of 1. to 10; Eumenes of 1. to 4. d Antigonus fighting against Eumenes in Cappadocia, had in his Army about 10000 foote, and 2000 horse; Eumenes had as before. Antigonus horse were to the foote, as 1. to 5. e Antigonus fighting against Alceras the brother of Perdiccas, had in his Army 40000 foote, and more than 7000 horse; the proportion well nigh of 1. to 6; Alceras had no more than 16000 foote, and 900 horse, failing much of Elians number. f Antigonus in his second battell against Eumenes, had 28000 footmen, and 800 horse, which is 1. to 3, and halfe; Eumenes had 35000 foote, and 6000 horse, very neare Elians proportion. Many other examples are to be read in Diodorus. But (as I said) these are Ramasses proceeding not of choice, but of necessity, which forced them to take such, as came to hand; as it alwaies falleth out in suddaine levies. And it seemeth the number of horse (allowed to the foote by Elian) was King Philips proportion; considering Alexander used it after he received his armie from Philip, who by premeditation, and fore-choice, had gathered it together with intent to invade Persia. And yet I finde h that Philip himselfe, when he fought against the Athenians and Beotians at Cheronea, had more than 30000 foote, and 2000 horse; which is 1. to 15; and in diuers other fights differed from Elian in the number both of horse, and foote. But the question is not, what was done, but what best to be done. And the number that Elian speaketh of, suiteth his Phalange best. For Philips device being to cast the horse into wedges of 64 horse a peece, and into 64 troupes; the greatest ranke of each wedge being 15, with in the reare, equall the front of the armed, and of the light armed; not in number of files (for the files of the foote were 1024. and the greatest ranke of the horse, no more than 960) but in quantitie of place giuing to the horse, standing in their order of 6 foote betwixt man & man, the 128 cubits of surplussage toward the difference of the horses bodies, and toward the small spaces that are to be left, betwixt Troop, and Troope. i Polybius lib. 6. 472. C. The Romans allowed a farre lesse rate of horse to the foote: In a Legion, according to Polybius his account, there were of Citizens 4200 foote, and 300 horse; of allies, and confederates 4200 foote, and 600 horse. In a Consular Army were 2 Legions of Citizens, and 2 of Allies, which came to 16800, a number not much differing from Elians Phalange of foote. Of horse 600, Allies 1200; in all making 1800; which cometh much short of 4096, (the number Elian alloweth to his Phalange) and holdeth proportion of about 1. to 9. The reason of this difference, may appeare in the fact of k Eumenes; who not much trusting his forces of foote against the Macedonians (accounted the best soldiers in the world) did

a Xenoph.  
Cyrop. lib. 7.  
186. B.

b Xenoph.  
Cyrop. lib. 6.  
167. C.

c Polyb. lib. 6.  
468. B. C.

d Polyb. lib. 6.  
468. D.

e Livy Decad.  
4. lib. 1. pag. 16.  
B.

g Diod. Sicul.  
lib. 16. 510.  
h Diod. Sicul.  
lib. 16. 555.

i Polyb. lib. 6.  
472. C.

k Diod. Sicul.  
lib. 8. 643.

of that age,) prepared himselfe a sufficient number of Horse with them to make a counter-balance against the Macedonian foote. And it hath bene the manner of Generalls of ancient time, if they trusted their Foote-forces, to make the lesse account of Horse: if they distrusted them; to encrease the number of their horse.

The Romanes trusting to their foote, required the lesser number of horse. The Grecians had the greater number of horse, both for the cause before recited, and further because they had continuall warre with Barbarians, that placed their confidence in horse; as the Persians, and the inhabitants of the lesser Asia.

*The names of the severall parts, and of the Commanders of the severall parts of the Phalange, and of the numbers under their commands.*

#### CHAP. IX.

THE files are ordered into bodies, which haue every one a proper name. For two files they call <sup>1</sup> a *Dilochie* of *thirtie two men*, whose *Leader* is tearmed *Dilochita*. Foure files <sup>2</sup> a *Tetrarchy*, and the *Leader* thereof *Tetrarcha* having charge ouer 64. men. Two *Tetrarchies* <sup>3</sup> a *Taxis* of 128. men, and 8. files, and the *Leader* thereof hath the name of *Taxiarcha*. Two *Taxies* goe to <sup>4</sup> a *Syntagma* of 16. files, and 256. men; and the *Leader* thereof is called *Syntagmatarcha*. A *Syntagma* of 256. men is called of some a *Xenagy*, and the *Commaunder* *Xenagos*. In every *Syntagma* of 256. are five <sup>5</sup> superordinary men, viz: <sup>6</sup> An *Ensigne*, <sup>7</sup> a *Rearr-commaunder*, <sup>8</sup> a *Trompeter*, <sup>9</sup> a *Sergeant*, and a <sup>10</sup> *Crier*. This *Syntagma* seemeth to haue <sup>11</sup> a *Tetragonall* forme of 16. men in length, and 16. in depth. Two *Syntagmas* make <sup>12</sup> a *Pentecostarchy* of 512. men, and 32. files, the *Leader* whereof is named *Pentecostarcha*. Two *Pentecostarchies* make <sup>13</sup> a *Chiliarchy* of 1024. men, and 64. files: and the *Leader* is called *Chiliarcha*. Two *Chiliarchies* are called <sup>14</sup> a *Merarchy* of 2048. men, and 128. files, whose *Leader* is named *Merarcha*. Of some this part is called a *Teles*, and the *Leader* thereof *Telarcha*. Two *Telarchies* make <sup>15</sup> a *Phalangarchy* of 4096. men, and 256. files, the *Commander* whereof is called *Phalangarcha*. Yet some call it a *Strategy*, and the *Commander* *Strategos*. Two *Phalangarchies*: <sup>16</sup> a *Diphalangarchy* of 8192. men, and 512. files. There are that tearme this part <sup>17</sup> *Meros*, and it is one of the wings. Two *Diphalangarchies* make a four-fold *Phalange* consisting of 1024. files, and 16384. men. So haue you in the whole *Phalange* of armed foot two wings, foure *Phalangarchies*, eight *Merarchies*, sixteen *Chiliarchies*, thirty two *Pentecostarchies*, sixtie foure *Syntagmarchies*, one hundred twentie eight *Taxiarchies*, two hundred fiftie six *Tetrarchies*, five hundred twelue *Dilochies*, one thousand twenty foure files.

#### Notes.

Hitherto haue bene shewed, the manner of atting, and leyning of *Souldiers*, filing, and the parts of files, ioyning of files, and ranking, the locall forme, and parts of a *Phalange*, the number of the armed, light-armed, and horse-men requisite to a *Phalange*. This Chapter contains, as it were, the matter, of which a *Phalange* is compounded; that is the severall bodies *Militarie*, ordred, and ioyned together, to make up the perfect forme of it. These bodies are many, and arise out of ioyning files by doubling  
fil

still their number, and haue euery one a seuerall Commander. The least is two files ioyned together, which is called a Dilochy; And because there are in Phalange 1024. files, there must also bee 512. Dilochies, which consist of two files a peece. If you double this body of two files, and make thereof a body of foure files, it hath an other name, and is called a Tetrarchy, of which Tetrarchies there are 256. in a Phalange. Double againe these 4. files, and make 8. the body is called Taxis. And these eight files, being doubled bring out the Syntagma of 16. files; which is a square number of men, 16. in the front, and 16. in the flankes. And so proceeding still in 6. doublings more, you come at last to the fourefold Phalange containing the number of 16384. men, and 1024. files. Now as in the Phalange there are 16. bodies out of these doublings, the Dilochy being the first, and the fourefold Phalange the last: So doth *Ælian*, appoint for euery body a Commander, who albeit they seuerally command, each his owne troupe, yet are they subordinately one vnder another, the lesser vnder the greater, till at last the souerainty of the command rest in the General of the Army. <sup>a</sup> The Dilochies are directed by the Tetrarches, the Tetrarches by the Taxiarches, the Taxiarches by the Syntagmatarchs, the Syntagmatarchs by the Penetarchs, <sup>a</sup> Xenoph. Cyroped. lib. 3. 203. A. arches, and they by the Chiliarchs, ouer whom are Merarches, and ouer the Merarches the Phalangarches, and ouer them the Commanders of the wings, or Diphalangarches, and the soueraine of the Armie or General is the highest, and last. The number of these Commanders a man would think were to no great purpose being in all (the 2. Diphalangarchies therein comprized) 1022. besides the file Leaders, which standing in the heades of their files, amount but to two men more; that is to 1024. For so many (as I haue said) are the files of the Phalange. But if the conueniency be obserued, it will not seeme impertinent. <sup>b</sup> For all the Leaders being in front, (therefore are they called Leaders, because they precede, and the rest follow,) it makes both a gallant shew, and that rancke being as it were, the edge of our battaile, not only serues to hew a sunder, and rent a peece the forces of our enemy; But also standeth as an assured bulwarke of defence before the rest of the Armie, that followeth. And it is well noted by <sup>c</sup> Leo, that the multitude of Commanders (in orderly diuisions) both signifies, that there are many worthy and valiant men in the armie: And is a meanes to keep the Souldiers in greater obedience, and to giue vndoubted effect to all directions. Of what qualitie and disposition, those Leaders ought to be, you may see in the \* fourth Chapter of Leos Tacticks. Onely I will adde, that as they are higher in dignity, so ought they in vertue and valour exceede those, that are vnder their command. <sup>d</sup> Leo cap. 4. 13.

1 A Dilochy] Consists of two files; for so signifies the word Dilochia: and the Leader is called a Dilochite.

2 A Tetrarchy] Of foure files; and the Leader is called a Tetrarch, one that hath the command of foure files. And here I must once more admonish, that in the words of diuers signification, we must not weigh, what is the proper signification, but how they are used in this Art, and booke.

For the word Tetrarch signifieth sometimes a King: as Helychius hath: and <sup>e</sup> Deid. a Cicero in *tarus* in Tully is called a Tetrarch, and <sup>f</sup> Herode in the Gospell; who both are common-ly knowne for Kings. Thessaly likewise was diuided into 4. Principalities, Thessalotis, Pthiotis, Pelagiotis, and Astiotis; whereof euery one was named a Tetrarchy. Onely the difference is, that a Tetrarch being a King, or a Governour, signifies him, that hath the government of the fourth part of the land, (for a Tetrarchy is the government of the fourth part) But a Tetrarchy in *Ælian* signifies a body military consisting of foure parts (4. files) and the Tetrarch commands not ouer one alone, but ouer all the 4. parts.

3 A Taxis] As the word Tetrarchy is diuersly taken; so is Taxis likewise. For sometimes it imports Order in a generall signification, as I noted before: Sometimes the

f Polyb lib. 3.  
25. B. & lib.  
11. 619 E.  
g Xenoph. de  
exped. lib. 4.  
325 B. ex Cy-  
rop lib. 8.  
202. C.  
h Arrian lib. 1.  
21 E.  
i Polyb. lib. 12.  
666 B.  
j Xenoph. Cy-  
rop. lib. 2.  
41 D.  
k Polyen. lib.  
3. § 10 in 4. hi-  
croz.

order of a battaile: <sup>5</sup> sometimes a company of any kinde of Souldiers, foote, or horse: as Taxis Pelastarum, Taxis Equitum; Sometimes a single Phalange, as in <sup>6</sup> Arrian mention is made of Taxis Oœni, Taxis Perdicæ, and Taxis Meleagri &c. who were Phalangarches, as the story sheweth. <sup>1</sup> Sometimes for all the armed, as Taxis Phalangitarum: Sometimes a rancke of men standing embattailed, as in Thucydides, who describing the battell of the Lacedemonians, saith the front (which he calleth the first rancke teen proteen Taxis) consisted of 448. But in a more speciall signification it is taken for a band of Souldiers. And in that signification the number varieth. <sup>1</sup> In Xenophon, it comprehendeth a hundred men: What the number of the Athenian Taxis was, I finde not delivered by any Writer. That they had Taxiarchs <sup>2</sup> Polyenus sheweth plainly. And if a man with leaue might gesse, I would imagine their Taxis consisted of 250 men: For I finde in the same place of Polyenus, that they had Chiliarchies, Pentecoliarchies, Taxies, and Lochagies. I haue before shewed, that Lochos in Xenophon is made sometimes of about 100. men. Out of which may be inferred with probability, that Taxis, being the next degree above the Lochagie, hath the double number, or more; The rather because a Chiliarchy hauing in it a 1000. the Pentecoliarchy must haue 500. and by likelihood the Taxis 250. as being the next office under the Pentecoliarchy. But whatsoeuer the Taxis of the Athenians, or of other people was, Elian maketh his Taxis up with 128 men, and 8. files; which is a double number to the Tetrarchy. With whom Suidas agreeth, giuing 2. Tetrarchies to a Taxis: and saith it consists of 128 men. The Commander of the Taxis is called a Taxiarch, as the Commander of the Tetrarchy is a Tetrarch. Here I am to note by the way, that the Interpreter of Xenophon translateth Taxiarcha, the Commander of a Cohort; where Taxis in the straighter signification cannot be taken for a Cohort because a Cohort differeth much in number, hauing in it at the least 500. and odd men, where the Taxis, when it is greatest hath no more then 128. And <sup>1</sup> Polybius saith plainly, that spira is the Greeke word, that fully expresseth the Romane Cohort.

l Polyb. lib. 11.  
641. C.

m Polybius  
callicha a Co-  
hort Syntagma,  
lib. 11. 641. C.  
n Diod. Sicul  
lib. 13. 391.

\* Cap. 31.

o Suidas in  
mecos.

p Suidas in  
Xenagos &  
Tul. Poll. lib. 1.  
cap. 10.  
q Polyb. lib. 11.  
33. B.

4. A Syntagma] The word cometh of Syntasso, or Syntatto, to place together, and a Syntagma is a body compounded of many parts artificially put together. <sup>2</sup> But it may be taken for any body in the armie. <sup>3</sup> Diodorus reports of Dionysius the elder That after he had diuided his whole Armie, (which had in it 30000) into three parts, he employed two against the Carthaginian Campe in diuers manner: himselfe tooke the Syntagma, or third part, which consisted of mercenary Souldiers, and led against that quarter of the campe, which had the Engins. <sup>4</sup> Elian also useth the word diuerslie; For he calles the whole armie by the name of Syntagmata, in the plural number, and sometimes Syntagma in the singular. And further giues the same name to a file. <sup>5</sup> Suidas likewise describing the length of a Phalange, saith, it is the first rancke (Syntagma) of file Leaders, which stretcheth forth in a right line from wing to wing. Whereby appeareth that which the Logitians affirme, (which I touched before) that there are more things then names of things: And that fit names cannot be giuen to all. The names that haue bene giuen by antiquity, to expresse the severall bodies of the Phalange, are to be retained by vs, as proper enough to signifie the thing they meant. Neither are we to vary from them, vnlesse we our selues can inuent better. The Syntagma that Elian here mentioneth, is framed of two Taxies, that is of 16. files, & of 256 men. The Commander of it is named a Syntagmatarch. And where he addeth, it is called of some a Xenagy, we are to vnderstand that <sup>6</sup> Xenagos was he (amongst the Grecians) that had the command of a band of strangers, (as he that leuied strangers was called <sup>7</sup> Xenologos) and the band it selfe was called a Xenagy. Why the Syntagma should haue the appellation of Xenagy, I cannot diuine; vnlesse the reason were, because it was about the

number

number, whereof strangers made their companies, that served amongst the Grecians. And I thinke, and shall till better information, that the body of the light armed called a Xenagya mentioned hereafter, had that name likewise for the same reason. Now of all the bodies in this Chapter mentioned, there is none that cometh so neere the companies used at this day, as doth the Syntagma, for (excepting that our numbers differre, and are in diuers places more, or lesse) the offices of each are alike. You haue in the Syntagma a Lieutenant, or Reare Commander; so in our Companies. In the Syntagma, is an Ensigne, and an Ensigne-bearer; the like in our Companies. In a Syntagma is one Sergeant, our Companies haue more. The Syntagma had a trumpet, and our Companies for the most part haue two drummes. We onely want a Crier, which euery Syntagma amongst the Macedonians had. What the use and place of all the Officers was, I will straight discover.

5 Five superordinarie men;] Namely the Ensigne the Reare-commander, the Trumpetter, the Sergeant, and the Crier of whom we last spake. That which I translated, superordinarie, is in Greeke Ectactoi. Suidas gives the reason, why they were so called: because saith he, they were not numbered as part of the battaile, that is ordered in files & rankes. As Xenophon saith of Mitiarches, Chiliarches, and Taxiarches, & other Commanders (whom Cyrus called to him) that they were not recounted amongst the militarie numbers, and might depart from the Phalange without altering the forme thereof. In the files they could not be, because they should so increase the number in the files, and make one longer then an other, and hinder doublings, and other motions, besides the deformity, they should bring in, in making the battaile vneuen: And a file of themselves they could not make. The like disorder would they bring in the rankes, where they could not conveniently stand, vnlesse some body filed with them, being much short of a file of themselves. Besides their employment it is to stirre here and there apart, as they are commanded: where they of files, and rankes neuer moue single, but iointly, as shall seem good to their Commander. And albeit these five bee removed from the battaile, yet remaineth the battaile without them entire of it selfe, and in perfect forme, as though there were no neede of them, when notwithstanding their use is otherwise so needfull that although the battaile may be, it cannot well be without them.

An Ensigne] Our use is to call the Ensigne-bearer an Ensigne for breuities sake; As a Drummer, a Drumme, a Trumpetter, a Trumpet; and that not absurdly. A distinction will easily appeare in common speech, by the application of words of circumstance to the one, or the other. The end why ensignes were devised appeares in Diodorus Siculus he giuing diuers reasons, why the Egyptians (whom he accounted the ancientest of men) were carried away with superstition of worshipping Beasts, after the manner of the Countrey, hath amongst other words these in effect: A second cause the Egyptians giue, because of old time being in diuers conflicts thorough disorder in their Armie, vanquished by their borderers, they had recourse to the inuention & bearing of Ensignes in their troupes. They say therefore, that preparing images of the beasts, they now worshipped, and fastening them to the ends of long stauies, the Commanders caused them to be borne aloft; by meanes whereof euery man knew of what troupe he was. And seeing this good order auailed much to victorie, they conceived, that the beasts were the cause of their safety. In recompence whereof they ordered, that none of these beasts should be killed, but be honoured with religious care and worship. Ensignes were then devised for readines to direct soldiers in particular, whither to resort in time of fight. Cæsar practiseth agreeeth hereto: he telling of his owne souldiers disorder hath thus: Whatsoeuer part they came into by chance, and to what Ensigne soeuer, there they staid, least in seeking their owne

Suidas in Ectactos.

Xenoph. Cy. top. lib. 3. 78.

Diodor. Sicul. lib. 1. 34.

Cæsar. de bell. gall. lib. 5.





a Suidas in  
Ecbat.

8 A Trumpet.] The invention of the Trumpet is attributed to Tiribenus Hercules *some*. But the different use of these officers is worth the noting out of Suidas: The Crier, saith he, serveth to deliver directions by voice, the Ensigne by signall, when noise taketh away the hearing of the voice: the Trumpet by sound, when thorough thicknes of dust a signall cannot be discerned: The Sergeant to bring such things, and dispatch such messages, as his *Syntagmarch* commands. So that these officers were held all necessary for a Company, the one supplying the defect of the other, and serving for use when the other failed. The Trumpet then was to be used according to Suidas, when neither the Crier, nor Ensigne could doe service. With the Trumpet was the signall given for the Campe to remove, for the Campe to lodge. By the Trumpet the Souldiers were taught their time to fight, their time to retire. The Trumpet set and discharged the watch. From the Trumpet came the measure of the Marche, and the quicknes, and slownes of Pace. In briefe, the Trumpet did all the offices, that the Dromme doth with us at this day. Whether the Trumpet or Dromme, are of most use in the field, I may not now dispute. Onely I will say that the Græcians and Romans the most expert and iudicious Souldiers, that ever were, held themselves to the Trumpet, and never used the Dromme. The Dromme was first invented by Bacchus, who, as Polyenus reporteth, fighting against the Indians in stead of Trumpets, gave the signall of Battaille with Cymballs and Drommes. From him it came to the Indians, who used it altogether, as Curtius noteth in the battell betwixt King Alexander the Great, and Porus. The Dromme of Parthians is described by Plutarch in the life of Craßus, and by Appian. And Leo saith, the Saracens, who invaded Christendome, and infected the Turkes with their superstition, ordered their fights by the Dromme. From this Easterne Asiaticall people it was brought into Europe; and now the generall custome is amongst all European Nations, that the foote have Drommes in the field, the horse Trumpets. And yet for the Trumpet, I cannot say, that all the Græcians held themselves precisely unto it. Plutarch much commendeth the Lacedemonian manner of ioyning with the enemy, and writeth it is in this sort: When the King hath offered the Gate (that was the Lacedemonian sacrifice, when they were to give battaille) hee straight commands all the Army to crowne their heads, and the Flutes to sound the measure of *Castor*: And himselfe withall beginneth the *Pæan*; (the song they used when they were to charge) and advanceth first against the enemy. So that it is a braue, and no lesse fearefull thing to behold them pacing according to the measure of the Flute; neither dissolving their order, nor throwing any astonishment of minde, but mildly, and ioyfully approaching the danger of conflict, diuiding out their Marche to the sound of the instrument. For it is not likely, that men so demeaning themselves, can be transported with feare, or choler. Nay rather they must needs have a settled minde full of hope, and assurance, as if God were present on their side: thus Plutarch. Out of whose words it is cleare, that the Lacedemonians used no Trumpets in fight, but Flutes, and made them their instruments to dance, as it were, the measures of warre by. For they used an easie, and slow pace, framed to the cadence of the sound, which may well be resembled to the solemne measure, in dancing. Athenæus rehearseth out of Herodotus, that the Lydians used the like. But he addeth; that the Cretans made choice of the Harpe for their instrument of warre; as though it had beene peculiar to that nation. Pausanias testifieth the like of the Lacedemonians. Polybius goeth not so farre, but affirmeth onely that the Cretans, and Lacedemonians in stead of Trumpets brought in Flutes, and measures into the warre. And if it were so that the Lacedemonians used Harpes, it is like, they sooke them from the Cretans. For I finde

b Polyen. lib. 1.  
in Baccho §. 1.c Curtius lib. 8.  
37.d Plutarch. in  
Craßoe App. in Par-  
thicus 143.c. D.  
f Leo cap. 18.  
§. 113.g Plutarch. in  
Lycurgo.h For this mea-  
sure see Iul.  
Pollux. lib. 4.  
cap. 10. §. 2.  
i Ezech. 40.  
hysan præter  
Pollux. lib. 1.  
cap. 1. §. 33.k Thucyd. lib.  
5. 391. A.l Polyen. lib. 1.  
in Prode. §. 1.m Athenæus  
dignotoph. lib.  
12. 117. A.n Pausan. in  
Lacædonicis. 193.o Polyb. lib. 4.  
219. E.

in Plutarch, that Lycurgus brought many of his lawes from Crete, and had great familiarity with Thales the Cretan, whom he also sent to Lacedemon, to make an over-  
sare for the establishing of his lawes, that were then newly finished. Tet Diodorus Siculus reporteth, that the Lacedemonians used also Trumpets in their Battailles. He writeth of a fight that was betwixt the Thebans, and Lacedemonians under the leading of Ageilaus, useth these words in effect: There was a strong fight betwixt them a long time, and at first Ageilaus had the better; but afterward, when the Thebans issued out of the City at all hands, Ageilaus seeing the multitude, caused the Trumpet to sound a retreat. The signe of retreat here, was given by Trumpet, and it seemeth the Lacedemonians had the use both of Trumpet, and Flute. Of the Flute in pacing toward the enemy to ioyne battaille; of the Trumpet in all other military signalls, such (I haue before noted) as the rest of the Græcians gave by Trumpet. The place of the Trumpet in the time of the Battaille was within the Phalange by the Ensigne. Thucydides placeth the Flutes of the Lacedemonians within the battaille, where they can finde no room, unless they stand by the Ensignes. And albeis Polienus saith, the Flute led the Army, and went before, yet that it to be understood in the marche. For in case of a Marche, or exercise, Leo also giueth the Trumpet place by the Captaine in front. When the fight commeth, he retireth himselfe to his place in the Battaille with the rest.

r Polyen. lib. 1.  
in Prode §. 6. 1.  
Pausan. in La-  
conicis 193.s Thucyd. lib.  
1. 393.t Polyen. lib. 1.  
in Prode. §. 1.u Leo cap. 7.  
§. 53.

9 A Sergeant.] The word Hyperetes signifieth a Minister, (which is all one with the French word Sergeant, as appeareth by the interpretation of our Law it selfe, wherein the Sergeants, next degree to Iustices, are called serientes ad legem. I reseyne therefore the name of Sergeant, because it is familiar amongst Souldiers. And a Sergeant hath the same office in our Warre that Hyperetes had amongst the Græcians. What his duty and service should be, is declared out of Suidas. There were of these officers, as well among the horse, as the foote, as appeareth in Xenophon. The estimation and worth of their places is expressed by the same Xenophon. Cyrus held the Sergeants in warre, saith he, worthy of no lesse honour, than messengers, and Embassadors in peace. He conceived that they ought to be trusty, skillfull in matter of warre, vnderstanding, quick, swift, industrious, and voide of feare; besides endued with all qualities requisite in the best sort of men; & that they were to accustom themselves to refuse no manner of service, but willingly vndergo whatsoeuer is laid vpon them by their Commanders. These Sergeants attended their Commanders in Marches, and other times, saue onely when Battaille was to be ioyned, and alwaies expected his command. During the fight, they retired to some place, where they might be ready at call; for (as I said before) they could haue no place in front.

x Suidas in  
Ecbat.y Xenophon.  
Cyrop. lib. 7.  
191. A.z Xenoph.  
Cyrop. lib. 3.  
44. D.a See Suidas in  
the word Keryx.

10 A Crier.] Concerning the office of a Crier, Suidas hath taught us, that he was to deliver the Commanders pleasure by voice. Leo calleth him Mandator, from the Latine word, because he signified to the Souldiers, Mandata, the commandments of the Captaine. In exercise he stood at the head of the Troupe, taking from the Commander the words of direction, and making, as it were, proclamation of them to the Souldiers; and serued often, when neither Trumpet, nor signall might be giuen; he was otherwise also of great use. For in all busines which required distinct signification of any sudden alteration in the Armie, the Crier had his part alone. Xenophon telleth in the Græcians returne out of Persia, that Clearchus their Generall led them not against the enemy, both because their courages began to fall, and also because they were all the day fasting, and it grew somewhat late. But yet hee turned not out of the way, lest he might seeme to flie; but holding on right forward, he came with the vanguard

b Leo cap. 4.

c Xenophon de  
exped. Cyri  
lib. 2. 277. E.

vanguard, to the next Villages by sunne-broken quartered; The very timber of the houses of some of those Villages was set downe, and carried away by those of the Kings armie. The first therefore lodged themselves reasonably, the last being be-nighted every man tooke vp his lodging as it fell out, and made a great noise, calling one after another, so that the enemy heard it. Whereby it came to passe, that the next of them fled out of their tents. This appeared the next day, for neither was there carriage-beast, nor Campe, nor smoake neere at hand to be seene. The King also was terrified as it should seeme, with the access of the Armie. Which he declared by the next daies worke. Yet in the proceesse of night a feare seased the *Gracians* themselves: and the tumult, and hurle-burly was such, as is wont, when men are possessed with feare. *Clearchus* in this distresse commanded *Telmides* the *Elean* (whom hee then had with him, the best *Crier* of those times) after silence, to make proclamation, that the Commanders signified generally, that whosoever could bring forth the Author of this tumult should haue a talent of silver for his paines. After this proclamation made by the *Crier* the Souldiers perceived, that their feare was vaine, and that the Commanders were in safety: *Hetherto Xenophon*. By which narration may appeare, that the *Crier* performed that, which neither *Trumpet* nor other signall could doe, the terror rising in the night (which is the time of confusion and disorder) and neither could the *Trumpet* give any certaine sound to remedy the perill, nor any other signall be discerned by reason of the darknesse; and this service was done by the *Crier* amongst his owne folke. His service against the enemy is declared in the fact of *Cleocritus* the Athenian *Crier* who after the fight, betwixt *Thrasylulus* and the 30. Tyrants (wherein *Critias* and *Hippomachus* were slaine) with a proclamation to the Citizens, reconciled them to *Thrasylulus*, and was cause that the Tyrants were deposed, and had their authoritie abrogated by the people. The like service was done by a *Crier* in the behalfe of the *Gracians* against the *Persians*, about the time of the battaile of *Plataea*. The storie is this: When the *Gracians* vnder the conduct of *Leotychides*, the *Lacedemonian*, and *Xanthippus* the *Athenian*, had gathered a flecte of 250. Gallies together to the end to deliuer the Ilanders, and the Citties of the Continent of *Asia* the lesse, out of the seruitude of the *Persians*, they failed out of *Delos*. The *Persians* then remained at *Samos*. But hearing of the approach of the *Gracians*, they left *Samos*, and put ower to *Mycale* a City of *Ionia*. And because they perceived their shippes vnfit for fight, they drew them on land, and fortified the place, where they landed, with a woden wall, and a deepe trench. Neuerthelesse they sent for foote forces, from *Sardes*, and other the next Cities, and assembled to the number of a 100000 men; And made prouision for all things necessarie for warre, the rather, because they suspected the *Ionians* would revolt. *Leotychides* hauing put his flecte in order, failed towards the *Barbarians*, that were in *Mycale*, and dispatched away before a shippe, wherein was a *Crier*, who had the shrillest voice in all the Armie. Him he commanded to faile vp close to the enemy, and to proclaime aloude, that the *Gracians* hauing overcome the *Persians* at *Plataea*, were now come thither to deliuer and set free the *Gracian* Citties of *Asia*. This was done by *Leotychides* to the end to disceuer the *Asian* *Gracians* from the *Barbarians*, and to raise a tumult in the enemies Campe. Which also came to passe. What service could bee of more importance, then to set a division betwixt the enemies? It was done by the voice of a *Crier*. More examples I could alledge, but these may suffice. The *Criers* place was, alwaies to attend the Commander in the head of the Troupes, vnlesse in the time of fight; at which time his voice could not be heard but gaue place to the noise of *Trumpets* and clashing of armor.

II A

II A Tetragonall forme] That is of foure equall sides, or foure square; But we must understand (which *Ælian* after teacheth) that there are two kinds of Tetragonall, or square bodies military, one in number, the other in figure. In number, when the front, and flank: of the body haue either of them as many Souldiers, as others, as the *Synagma* haue 16. in front, and 16. in flank. In figure, when the number of the front is greater, then the number of the flank, and yet front and flank stretch out an equall length of ground; as in the squares of horse, whereof *Ælian* speaketh to hereafter. This last square is at this day called a square of ground, because the space of ground, which containeth the length of the front, stretcheth out insly as far, as the space of ground, which containeth the depth of the flank. It is caused by the difference of distance, which is betwixt the Souldiers in front, and betwixt the Souldiers in flank. In front, being closed to fight, the distance betwixt Souldier, and Souldier, is but a cubite; that is a foote, and a halfe. The distance betwixt Souldier, and Souldier, in flank is two cubits, or three foote, which proportion will giue no more, then halfe so many men in flank, as in front, and yet maintaine the truenesse and euennesse of the sides of the figure; that is the length of the line, which meauureth the front, and flank, shall be all one.

12 A Pentecosiarchie] The word is a command of 500, and that was sometimes the number. In the Macedonian Phalange, it comprehendeth a 512 men. The cause of difference is the difference betwixt the file of the Macedonians, and the file of the ancient *Gracians* (whereof I haue spoken before) the odde 12 men coming in by the fifth doubling of 16. And the number being so neere 500, though somewhat above, the name of Pentecosiarchie is still retained; because it was then in use, and no other more fit could be found.

13 A Chiliarchie] The command of 1000 men according to the name; *Ælian* giueth it a 1024, from the doubling of 512. The Tribunes of the Roman Legions are by the Greeke Historians termed Chiliarchs; yet is there a great difference; for the Chiliarchs haue no more command, then ouer their Chiliarchy consisting of 1000 men, and sometimes of more, as here in *Ælian* of 1024. But every Tribune had in his turnes the command of the whole Legion. And againe there being 12 Tribunes, to every Legion (which at first had in it 3000, afterward 4000, then 5000, and in the time of *Vegetius* 6000 men) how should a Tribune be called a Chiliarch and be a Leader of a thousand, there being in the legion but 6000 men at the most, and yet 12 Tribunes; so that every one could not haue, above 500 for his command; and in *Polybius* time, (the legion being but 4200) not above 300 and odde. But the Roman manner of warre and ordering of troupes, differed much from the *Gracians* and the *Gracians* in terming a Tribune a Chiliarch, tooke the next word, and most significant amongst them to expresse the charge of a Tribune. Our Coronells, for their command, of a Regiment come neerer to the *Gracian* Chiliarchs; yet ours differ in that they haue Companies in their owne Regiments, which the *Gracian* Chiliarchs had not; and where? *Q. Curtius* saith, that the Chiliarchy was first instituted at Babylon by Alexander, as a reward for service, and it seemeth to be otherwise. For as I finde this in no other Author, so finde I, that Chiliarchs were long before Alexanders time. *Xenophon* reporteth, that *Cyrus* tooke encouragement to his souldiers to be valiant, promised to the Taxiarchs to make them Chiliarchs, to the Lochagi to make them Taxiarchs, to the Dechatchs to make them Lochagi, to the Pempadarchs to make them Decatchs; And that *Cyrus* made *Chrysanthas* a Chiliarch of horse in regard of his worth, and forwardnesse in seruice. And afterward he calleth *Phranuchus*, and *Asiadas*, Chiliarchs of horse, and *Attabalus* and *Artageras* Chiliarchs of foote. *Polyenus* witnesseth that in *Iphicrates* his time the Athenians had Chiliarchs, and Pentecosiarchs, so that the institution

Ælian cap. 18.

a Plataea, in  
Romulo.  
b Salust. in In-  
guria, 3.  
c Veget. lib. 2.  
cap 2.

d Quint. Curt.  
lib. 5. 166.

e Xenoph. Cy-  
rop. lib. 2. 43.

f Xenoph. Cy-  
rop. lib. 4. 88 B.

g Xenoph. Cy-  
rop. lib. 6.

h Polyen. lib. 3.  
in Iphicrate  
cap 10.

a About a 76  
pounds staling  
ful. Poll lib. 9.  
cap. 6. 430. 437.

b Xenoph.  
hisor. Gize.  
lib. 2. 474.

c Diodor. Sic.  
lib. 11. 260.

a Arrian. lib. 3.  
64. C.

b Diod. Sicul.  
lib. 18. 653.

of Chiliarchs could not be referred to Alexanders being at Babylon, considering it was in use before; And <sup>a</sup> Arrian reporting the same story, saith not, that Alexander first brought up Chiliarchies there, but that he ordained two Lochi in every horse troupe (where to that day there had bene none) and two Lochagi to command them. Indeed <sup>b</sup> Diodorus Siculus, writes thus concerning a Chiliarch. Antipater, saith he, lying upon his death-bed declared Polyperchon Protector of the Kings (being the eldest of those, that had served Alexander in his warres, and much honoured of the Macedonians) and his owne sonne Cassander the Chiliarch, and second main authority. The place and institution of the Chiliarch first grew to name and honor under the Persian Kings. So writes Diodorus of this Chiliarchy which Antipater bestowed upon his sonne Cassander. Which notwithstanding seemes much to differ from the common Chiliarchy of the Phalange, whereof Curtius speaks. For Diodorus saith, he was next to Polyperchon in authority. Where in the Phalange there were many Commanders, namely, the Merarchs, the Phalangarchs &c. above the Chiliarchs. Adde that he saith, the institution of this Chiliarch came from the Persian Kings, when the Chiliarchs of the Phalange had their beginning from the Græcians, and were ordinarie in Phalanges, as I haue shewed. Lastly where Diodorus reporteth, that it had the increase and aduancement of honour from the Persian Kings, he sheweth plainly, it was not Alexanders invention. And the same Diodorus speaking of the death of Ochus King of Persia telleth, that he was poisoned by Bagoas his Chiliarch in the time of the reigne of Philip, Alexanders father. This Chiliarch then I take to be the same, that the Generall of an armie is with vs. And I can hardly be perswaded, that Antipater would bequeath a lesse place to his sonne Cassander.

14. A Merarchy] The command of a part or halfe; for a Phalangarchy consisteth of two Merarchies. So that a Merarchy is halfe the Phalangarchy, and containeth 2048 men. This part is also called Telos, of which I haue spoken in my notes to the seventh Chapter. And yet the word Telos is not alone used in bodies of foote. For <sup>c</sup> Thucydides speaking of the fight by sea betwixt the Corcyreans, and Corinthians, telleth, that the Corcyreans gaue the right wing to ten Athenian shippes, and hauing of their owne a 100 and 10 shippes, diuided them into three Telo, euery of which was commanded by one of their Generalls: so that Telos there signifyeth not a certaine number of ships, but a part of their fleet diuided into 3. & the Commanders of the Corcyreans are call'd Strategoi.

15. A Phalangarchie] The command of a single Phalange. Of this kinde were <sup>d</sup> the 4 Phalanges in Alexanders armie (as I take it) which were led by Canos, by Perdicas, by Craterus, by Amyntas, by Ptolomy, by Meleager, and other, as Arrian hath 3. Before Philip and Alexander gathered those forces together, wherewith Persia was subdued, the armies were of smaller number amongst the Græcians. Neither was it in many Cities might to raise 4096 men; which go to the Phalangarchy of Ælian: If any did, they might well call it an armie (Strategia, and the Commander Strategos) and the name of Strategos, or Generall was usually giuen to him, that commanded in chiefe ouer an armie (though small) sent out by any Citie to warre. So then, as the Generall was call'd Strategos, a Phalangarchy might also be call'd Strategia. I haue before noted, that the sections of the Phalange are limited, and laid out by the Phalangarchies. And where there are 3 sections in a Phalange, the middle section is in the midst of the 4 Phalangarchies, 2 Phalangarchies lying on the one side, and 2 on the other. The 2 other sections are one betwixt the 2 Phalangarchies of the right wing, the other betwixt the two Phalangarchies of the left wing, for betwixt euery Phalangarchie was a space or section.

16. A Diphalangarchie] The command of two Phalangarchies; this was one of the wings. Ælian giueth it no Commander ordinary, neither doe I remember, that I

haue

haue read Diphalangarches of Diphalangarchia, as Phalangarches of Phalangarchia; Tetrarchs of Tetrarchia. For was there one, alwaies that commanded the wings, appointed to that place extraordinarily? So <sup>a</sup> Philip, at the battaile of Cheronæa (where he overthrew the power of the Athetians, and Thebans, and their Allies) took the one wing to himselfe, and gaue the command of the other to Alexander his sonne being then but young. And <sup>b</sup> Alexander as Granicus commanded himselfe the right wing, and appointed Parmenio to the left. So in the battailes against Darius at <sup>c</sup> Illos in Cilicia, and at <sup>d</sup> Gaugamela in Syria.

17. Meros] Meros is a part by diuision, coming of the verbe, meiro to diuide. And as before, Amerarchie, was halfe a Phalangarchie, so here Meros is halfe the fourth Phalange. Each then signifyeth halfe, but to distinguish them, the one is called a Merarchie, that is a Commande of halfe, the other Meros, that is halfe: A distinction sufficient to know the one from the other. Two of these Meros make the Phalange containing 16384 men. And these are the bodies militarie, which Ælian in this Chapter describeth, and which were in use amongst the Macedonians. The other Græcians used other bodies in their armies. The <sup>e</sup> Lacedemonians diuided their whole city, into fixe bodies, horse and foote; euery one of which was called Mora, or Moira. Their Generall was one of their Kings, for they had alwaies two. Euery Moira, had a Polemarch (not much differing from our Coronels) foure Lochagie, eight Pentecosteres, and sixteen Enemotarchs. What the number of the Moira was; is vncertaine, by reason of the seuerie the Lacedemonians used in their government, as <sup>f</sup> Thucydides saith. Plutarch reporteth, that Ephorus the historian, giueth 500 men to the Moira, Calisthenes 700. Polybius and others 900. <sup>g</sup> Diodorus Siculus, agreeth with Ephorus, and alloweth but 500 to the Moira. And <sup>h</sup> Xenophon numbeth the Moira of the Lacedemonians, which Iphicrates, defeated hard by Corinth, to haue been about 600 men. <sup>i</sup> See the Scholiastes, of Thucydides, for the exact number of these bodies. The <sup>j</sup> Athenians had their Chiliarchs, Pentecosiarchs, Taxiarchs, and Lochagie, as I haue said <sup>k</sup> before. And with them were the Lochagi left, where with the Lacedemonians they were next the Polemarchs, but the number of the Lochos was not alike, as I haue likewise shewed before. Cyrus in <sup>l</sup> Xenophon hath these orders militarie, Myriarchs Commanders of ten thousand, Chiliarchs of a thousand, Taxiarchs of a hundred, Lochagi of twentie foure, Decadarchs, called sometime Dodecadarchs of 12, Pempedarchs of fixe, which are also called Hexadarchs. <sup>m</sup> Vrbicius differeth not much from Ælian, saue onely in the number of the file, and the Officers of the file. For where Ælian hath sixteen to a file, Vrbicius hath but ten: and Vrbicius alloweth but two Commanders to the file, the File-leader, and the Bringer-up Ælian foure; the foure Enemotarchs. For the number of the Officers, in the Phalange they agree. And yet the names are not all one. Ælian beginneth with a Dilochite commanding two files, thirtie two men, Vrbicius with the Lochagos, who likewise commandeth two files of his, and fixe men more, namely 25 men. The next in Ælian is a Tetrarch ouer sixtie foure men, in Vrbicius a Pentecontarch ouer fiftie men. Vrbicius hath next a Taxiarch, a Syntagmatarch, a Penteosiarch, a Chiliarch, a Merarch, a Phalangarch: And so hath Ælian. The next in Ælian is a Diphalangarch, Commander of 8192 men; Vrbicius termeth him a Myriarch that is the Leader of ten thousand men. The Tetraphalangarchy is last in both. But Vrbicius assigneth no more, then 16 thousand to his Phalange, Ælian 16 thousand and 384. Iulius Pollux thus diuideth his bodis, a Myriarchie, a Chiliarchie, a Taxiarchie, a Hecatontarchie, and a Lochagie. What a proportion Leo makes, it to be seene in the fourth Chapter of his Tacticks. Because, he hath a mixture of the Romane and Greeke Orders, I remit the Reader to the booke.

G 2

So

a Diod. Sicul.  
lib. 16. 155.

b Arrian. lib. 1.  
14. D.  
c Arrian. lib. 3.  
34. B.  
d Arrian lib. 3.  
60. B.

e Xenoph. de  
rep. Lacedem.  
686. A.

f Thucyd. lib.  
2. 39. C.

g Plutarch. in  
Pelopid. 1.

h Diod. Sicul.  
lib. 15. 473.

i Xenoph. lib.  
1. 4. 38. C.

j Scholiast. id  
before.

k Thucyd. lib. 5.  
392.

l Polyan. lib. 3.  
in Iphicrat.

m Xenophon  
Cyroped. lib.  
1. 43. A.

n Etymologic.  
mag. in voce  
Stratos.

c Thucyd. lib. 1.  
33.

d Arrian. lib. 1.  
14. E. & 35. E.  
& 60. A.

## The Tactics

So then *Ælian* hath in his *Phalange* of armed ( besides the two *Diphalangarchis* ) 1020. Officers.

<i>Dilochites</i>	512.
<i>Tetrarchs</i>	256.
<i>Taxiarchs</i>	128.
<i>Syntagmatarchs</i>	64.
<i>Pentecostarchs</i>	32.
<i>Chiliarchs</i>	16.
<i>Merarchs</i>	8.
<i>Phalangarchs</i>	4.
	1020.

I haue set downe the figures of all the bodies described by *Ælian* as farre, as the *Phalangarchy*. The rest would haue beene troublesome to insert as requiring more paper, then would stand with any reasonable proportion; neither are they greatly needfull. For two *Phalangarchies* ioyned in an euen front, and in a conuenient distance, will figure out a *Diphlange*; foure in an euen front with a like distance will make the fourefold *Phalange*. So that thereby the forme of it will appeare.

The precedence, and dignitie of place in the offices of the *Phalange*.

## CHAR. X.

**T**He best of the *Phalange* Commanders is placed on the right wing, the second on the left wing, the third in valour in the right hand next the second *Phalange* toward the middle section. The fourth on the left hand next the first *Phalange* toward the middle section likewise. So the first and fourth *Phalange* haue Commanders of the first, and fourth worth: The second and third *Phalange* haue Commanders of the second and third worth. Now wee will shew by demonstration, that the first, and fourth worth, and valor, are equall to the second, and third; So that the Commanders in each wing are of valor alike.

The Leaders also of the severall *Merarchies* are thus disposed. The first hath his place in the head of the first *Phalange* on the left hand: The second on the right hand of the second *Phalange*: The third on the left hand of the third *Phalange*: The fourth on the right hand of the fourth *Phalange*. Also the Leaders of files in every *Tetrarchy* are so placed, that the Leader of the first file hath prehemine in valor and place; the Leader of the fourth file standeth next him: Then the Leader of the third file, and the Leader of the second file last. For then are *Dilochies* of equall valor when the first *Dilochie* hath the first, and fourth Leaders, the second *Dilochie* the second, and the third Leaders in valor and reputation. For it appeareth in the *Mathematicks*, that, when there are *Analogies*, or answerable proportions of foure magnitudes propounded, that, which ariseth of the first, and fourth, will counteruaile that, which ariseth of the second, and third magnitude. And because there are foure *Tetrarchies* in every *Syntagma*, wee may giue the Leaders of the *Tetrarchies* place according to the same proportion, as to place the *Tetrarch* of the first *Tetrarchy* on the right hand, giuing him the first place of worth; on his left hand the *Tetrarch* of the fourth *Tetrarchy* in the fourth place of worth. Then againe next him the *Tetrarch* of the third *Tetrarchy* in the third place of worth, and on his

left

left hand the *Tetrarch* of the second *Tetrarchy* in the second place of worth. In like manner are the greater commands also to be proportioned.

## Notes.

**T**He former Chapter was of the Officers and of the bodies of the *Phalange*; this is of the place of every one, according to his worth. And first wee are to note, that all the Commanders were placed in front of those, that they commanded; to the *Ælian*, and they might direct, and lead them as occasion should require. For *Ælian* Xenophon saith of Cyrus army, the *Decadarchs*, or file Leaders, had care of the files, the *Lochagie* of the *Decadarchs*, the *Taxiarchs* of the *Lochagie*, the *Chiliarchs* of the *Taxiarchs*, the *Myriarchs* of the *Chiliarchs*; So in the *Phalange* of *Ælian* the file Leader had the command of his file, the *Dilochites* of the file Leaders, the *Tetrarchs* of the *Dilochites*, the *Taxiarchs* of the *Tetrarchs*, and so the rest, till you come to the General, who cared for all, directed all, and under whom all the Commanders were. The General hath bene placed sometimes in the right wing, sometimes in the midst of the *Phalange*. Vegetius saith, that the General of the Armie is accustomed to be in the right wing betwixt the horse, and the foote. Hee addeth, this is the place, which gouerneth the whole battaile, from whence the saluing out is most direct, and free. Therefore he standeth betwixt both, that hee might both gouerne horse, and foote with counsell, and with authority exhort them to fight. Cyrus in his battaile against *Cresus*, took his place in the right wing, betwixt the right hand point of the battaile, and of the horse, that were ranged in the wing; Alexander the great, in his battailes tooke the same place; Timoleon in his fight against the Carthaginians placed himselfe in the midst of the battaile. Diodorus Siculus saith, that, it is the manner of the Scythians, that the King should stand in the midst of the *Phalange*. The like doth *Ælian* affirme of the Persians, and saith, that Darius had that place. Leo also giueth the midst of the battaile to the General. And there placeth the battaile ouer which he would haue him to command.

**1** The best of the *Phalangarchs*] This ordering of the *Phalangarchs* the best on the right hand wing, the second on the left, the third next him in the left wing on his right hand toward the middle section: The fourth in the right wing on the left hand of the first toward the middle section shew, 2. 3. 4. cometh out of a Geometrical proportion, which proportion giueth law to the ordering of the rest of the Commanders. The rule is this: 4. Magnitudes which equally exceede the one the other being compared together that which ariseth of the first, and fourth, is equall to that, which ariseth of the second, and third. As 2. 8. 14. 20. each exceedeth the other, 6. The addition of 2. to 20. begetteth an equal number to 8, and 14. added together. So is it in all other numbers, that haue the same equalitie of excess one aboue another. Out of this rule of proportion, *Ælian* deriueth the giuing equalitie of strength in the Leaders to every body in the *Phalange*. For Leaders and Commanders are (or ought at least to bee) chosen by worth, and valour: and the preferments of the field haue bene held the due reward of vertue. Say then the *Phalangarchs* are preferred to their places according to their worth, and that the first *Phalangarch* is most worthy, the second next him, the third next, the fourth least deserving of the foure. If you should place them, as their worth is in a rancke successively one after another, the best before the first *Phalangarchie* in the right wing, the second before the next *Phalangarchie* in the same wing, and leaue the other two *Phalangarches* to command the left wing, the disproportion would be great; the third and fourth not being able to match the worth of the first, and second.

G 3

But

But if you place the best Phalangarch before the first Phalangarchie on the right wing, the second before the second Phalangarchie of the left wing, the third Phalangarch next him before the third Phalangarchie on the left wing, toward the middle Section; the fourth before the fourth Phalangarchie of the right wing toward the same Section; the values of the Commanders, will be equal in both wings. For as in the number 1. 2. 3. 4. one and 4. make 5, as many, as is made by joining 2 and 3 together; so the worth of the fourth Phalangarch joined to the worth of the first will arise as high in true valuation, as the worths of the second and third joined together. And where the Phalangarchie on the left corner of the left wing is called the second, and the next Phalangarchie standing in the same wing the third; it is to be understood that it is second in dignity, not in succession of number; for the fourth Phalangarchie in dignity standeth in place and number next the first; and the second Phalangarchie hath the last place of the whole Phalange. Their places then are after this manner according to Elian.

2      f      3      g      d      c      a

For the understanding whereof, you are to note, thus

- a signifieth the first Phalangarchie.
- b the second Phalangarchie.
- c the third Phalangarchie.
- d the fourth Phalangarchie.
- e the Section of the right wing.
- f the Section of the left wing.
- g the middle Section.
- h the place of the first Phalangarch.
- i the place of the second Phalangarch.
- j the place of the third Phalangarch.
- k the place of the fourth Phalangarch.

2 The Leaders of the Merarchies ] As the Phalangarchs so are all the other Commanders of the severall bodies placed by foure, and the same observation to be had, of the dignities of the place, that was in the Phalangarchs: and these 4 Merarchies (for Elian speaketh of no more than 4) must stand thus.

P      M      M      P      P      M      M      P

P, standeth for Phalangarchs.  
M, for Merarchs.

Robortellus confesseth he findeth these Merarchs so placed in a written booke, and it is the true placing. The figures, he setteth downe out of his owne wit (as he termeth it) carry with them no savour of Elians proportion. Patricius likewise seemeth to have mistaken this proportion in the figures he hath set downe, of which not one is right. I will referre the Reader to their bookes, admonishing him onely of the misfaking. But Elian placeth here but 4 Merarchs; what order shall be for the other foure? I have alwaies thought Elian defectue in this place, neither could I hitherto finde any man, that hath brought light to cleare the doubts. Patricius that purposely discourseth of this place of Elian

Elian, speaketh of bestowing 4 Merarchs onely, as though the rest were to be throwne away from the Phalange. Robortellus seeking to bestow all 8; bestoweth them indeed, but not according to Elians proportion, which notwithstanding he would seeme to follow. His figure is this.

P. M. M. M. M. P. P. M. M. M. M. P.

The right wing      1. 8. 4.      3. 6. 3.      4. 5. 2.      1. 7. 2.      The left wing.

The Middle.

The proportion which, as I said, and not Elians. For Elian placed the first Merarch in the right wing, he placeth him in the left; Elian the second in the second Phalangarchie, he in the fourth; Elian the third in the left wing, he in the right; Elian the fourth in the fourth Phalangarchie, he in the first. The rest are so jumbled together, as though any thing else had beene sought for, rather than proportion. I take not upon mee to over-rule any doubts; but if amongst the rest I enterpose mine opinion, I hope, I shall not incurre just blame. Thus then: seeing Elians meaning is by evenesse and worth of number of both wings, to finde out the worth of the Commanders of both, if I so distribute them, that the number of the one side shall counterbalance the number of the other, I cannot much stray from Elians meaning. The figure following will doe it.

P. M. M. M. M. P. P. M. M. M. M. P.

The right wing      1. 5. 1.      4. 8. 4.      3. 7. 3.      2. 6. 2.      The left wing.

The Middle.

In this figure I have observed precisely the place, that Elian gave to the 4 Merarchs. The first standeth on the left hand of the first Phalangarch; the second on the right hand of the second Phalangarch; the third on the left hand of the third Phalangarch; the 4th on the right hand of the 4th Phalangarch. The rest I have added, and divided according to the placing of the first: So that the number that ariseth of the addition of both wings, is alike, and the proportion held. In all the rest of the bodies, where there is a Command over 4; the keeping of the proportion hath no difficulty. So every Phalangarch commandeth over 4 Chiliarchs; every Merarch over 4 Pentecostarchs; every Chiliarch over 4 Syntagmatarchs; every Pentecostarch over 4 Taxiarchs; every Syntagmatarch over 4 Tetrarchs; every Taxiarch over 4 Dilochites; every Tetrarch over 4 files; In all which the Commander, which hath the right, hath the first place, he that hath the point of the left hand, the second place; he that standeth on the right hand next to him, the third place; the last place is his, who standeth next to the Commander of the right point on the left hand. And for the place of the Phalangarchs, and of 4 of the Merarchs, and the file-leaders, and of the Tetrarchs, they are laid out by Elian. The rest appeare by these, and are to be squared by the same rule of proportion, as Elian ad-  
monished.

The whole wing.

Theright wing      The left wing

1	3
1	7
1	3
4	2
3	6
4	2
23	23

The Merarchs alone.

1	7
1	3
4	2
3	6
4	2
18	18

The

*The distances to be observed betweene Souldier and Souldier in opening and shutting the Phalange.*

CHAP. XI.

WE are now to speake of *distances* both in length, and depth betwixt Souldier, and Souldier, as they stand ordered in Battaile. The *distances* vary in three sorts. For first they are placed in thinner distance for some speciall causes. And a Souldier so placed taketh vp <sup>1</sup> 4 cubits. But in <sup>2</sup> *Denfation* or *closing* he taketh vp 2 cubits. <sup>3</sup> In *Conspiration* or *shutting*, one cubit.

*Denfation* then, or *closing* is, when we draw wide distances close together, and by *side-men*, and *followers* (that is both in *length* and *depth*) gather vp the bodie of the *Phalange*: so notwithstanding that the souldier yet hath libertie to moue, and turne about.

*Conspiration*, or *shutting* is when the *Phalange* by *side-men* gathereth it selfe yet closer together, then in *Denfation*; so that by reason of the nearenesse there is left no *Declination*, or turning of faces either to the right, or left hand.

The vse of *Closing* is, when the *Generall* leadeth the *Phalange* against the enemy. Of *Shutting* when he would haue it stand fast (and as it were *locked vp*, and *serred*) to receiue the charge of the enemy.

Seeing then there are 1024 *File-leaders* in the front of the *Phalange*, it is plaine that <sup>4</sup> in their ordinary array they take vp in length 4096 *Cubits* <sup>5</sup> (that is ten furlongs, and ninetie six cubits) In *Closing* five furlongs, and forty eight cubits. In *Shutting* two furlongs, a halfe, and fower and twenty cubits.

Notes.

AFTER Souldiers are armed, and distributed into bodies military, the next care is to be had of their Mouing. For as a man, let him be neuer so well proportioned, and strong, if he pace disorderly, and either set too great strides, or reele here, and there, or so mince, and tread out his steps, as if his legs were bound together, groweth hereby deformed, and not onely loseth his comelimesse, but his actiuitie withall, and possibility to performe any thing by strength: So is it of an Armie, that hath either too great distances, or

<sup>a</sup> Caesar. de bel. gall. lib. 3.  
<sup>b</sup> Plutarch. in Philopomeno.

is thronged vp, or pestred too close together. <sup>2</sup> Too much thronging bindeth, as it were, the souldiers hands, and taketh away the vse of his weapons, as on the other side <sup>b</sup> falling one loose from another, and standing or mouing too farre asunder, maketh the Battaile weak, and disoriented, and subiect to the enemies entry, and easie to be broken. The meane betwixt both was brought in by King Philip, King of Macedonia, who first constituted, and raised the Macedonian Phalange, and invented the distances of opening and closing the same; imitating the <sup>c</sup> setting of Targets (called Synaspismos) practised by the old Heroes at Troy. Out of his discipline sprung the distances mentioned here by Elian: which are of three sorts; The first are large distances of

<sup>d</sup> Polyb. lib. 13. c. 64. C.  
<sup>e</sup> Lco cap. 17. § 61.  
<sup>f</sup> Polyb. lib. 17. 764. A.  
<sup>g</sup> Lco cap. 7. § 54.

1 Foure Cubits] Which amount to six foote. For a Cubit containeth a foote and a halfe. This <sup>d</sup> distance was used in marching, or else in solemne pompes and shewes. And the souldier hauing a pike of <sup>e</sup> 14 Cubits or 21 long, whereof one halfe lay forward on his shoulder, and the other halfe backward, it was requisite he should haue a reasonable large distance both in file and ranke, <sup>f</sup> to the end, that in turning this way, or that way,

way, or that way, or moving out of his place (for no man in his marche can alwaies hold his ranke) he offended not his next neighbours therewith. This distance our exercise at this day calleth open order. The next distance is of

Two Cubits] Or three foote. The name of it in Greeke is Pycnosis, that is thickning. In Leo it is called Sphinxis, (knitting together) in our moderne exercise Order. And it is, when from the distance of 6 foote, we draw our Phalange both by file, and ranke, so close, that the souldiers stand but 3 foote one from another euery way. This distance is used, when the Army approacheth neare to the enemy (and onely commeth not to charge) that it may be ready to stout, and locke it selfe for the charge, which is performed in the last distance of

One Cubit] A foote and a halfe. This is called Synaspismos, ioyning Target to Target. For, as I before shewed, the pikemen of the Macedonians used also Targets with their pikes, and in charging the enemy closed so neare in front, that their owne Targets touched one another. This kind of fight the Egyptians used in Xenophon (which he calleth locking together of Targets) and by meanes thereof had the advantage against the Persians. The Parthian horse likewise coming to charge Crassus with their stauers.<sup>g</sup> After they perceiued the depth of the locking of Targets, and the settlednesse, and stedfastnes of the Roman Phalange, they retired, and durst not come to hands with them. And<sup>i</sup> Diodorus Siculus writes that Alexander besieging the City of

Halicarnassus, there was in the City, and in seruice of Darius one Ephialtes an Athenian, a man of great valour, and strength of body; He by the permission of Memnon Generall of Darius Armie, determined to make a sally. And taking to him 2000 mercenarie souldiers, all chosen men, and giuing brands flaming with fire to one halfe, and reseruing the rest for fight, he opened the gates, and fell out, throwing fire vpon the engines of battery, which soone caught a mighty flame; And marshalling the rest into a thicke and deepe Phalange, himselfe led on, and was the first that fell on the Macedonians coming to aide, and to quench the fire. Alexander aduertised hereof speeded to the medley; & ordered first the Macedonians in front, after them other choice men, for seconds; and in the third place men of extraordinarie account for their prowesse, himselfe leading them on sustained the enemy, which seemed vnresistible, and sent others to flake, and put out the fire, and to preserue the Engines. The fight was hot, and albeit the Macedonians found meanes to quench the fire, yet had Ephialtes the better in the fight; who both himselfe killed many with his owne hands, and the towers from the walls furnished with many Carapets annoyed greuously the Macedonians. In so much that some falling in the place, other some forsaking their ground by reason of the number of Engine Darts that fell thicke amongst them, Alexander himselfe was reduced to extremitie. Here the old souldiers of the Macedonians, although otherwise freed from such seruice in regard of their age, hauing of a long time followed the warres with King Philip, and gained many a battaile, were by this occasion tolled out to succour; and as they excelled the yonger sort in greatnes of spirit, and military experience, so meeting with the run-a-waies, they bitterly reuiled, and taunted them for their cowardice; Then \*serring themselves close, and ioyning their Targets together, they repressed, and held the enemy short, who now seemed to haue the victory in his hands. Finally killing Ephialtes, and many other, they droue the rest into the City. A memorable seruice of the use of Targets, and of the Synaspisme of the Macedonians, which was not used, but when they either gaue vpon, or received the charge of the enemy. And the Targets so knit together serued for a wall (as it were) to the whole Phalange, and by them the souldier

<sup>g</sup> Xenoph. Cyrop. lib. 7. 178. A. It is called by Thucydides, Synaspis, Thucyd. lib. 5. 393.

<sup>i</sup> Appian. in Parthieis. 144. A. 164. D. C. Diod. Sicul. lib. 17. 575.

\* Synaspismos

was defended from the mischievous weapons of the enemy, and his body covered even from the piercing of the sword. Synaspismos then, or flouting, is that distance in the Phalange, which bringeth the soldiers Target to touch one another and is limited by Ælian to a cubit (that is a foot and a half) between side-men and side-men in the front. What distance the followers should have, Ælian setteth not here done in plaine words; but implies, that they should hold their 3 footes still in that he faith the Phalange in conspectu gathereth the side-men closer, then in densuatio, but speaketh nothing of followers. <sup>a</sup> Polybius teaches it more plainly; who gives them three footes distance from the Leader, both according to the Macedonian and Roman discipline, and that for the use of their armes: with whom Ælian also agreeth <sup>b</sup> afterward. In what manner the Targetiers made their closings, and how their Targets were cast from the backe, where they hung, to the left shoulder, I have before noted in the second Chapter, and therefore thinke it needlesse here to repeat. <sup>c</sup> Now for the ground, that a Phalange taketh up in each of these orders, Ælian sheweth it in the words following, allowing the Phalange.

<sup>a</sup> Polyb. lib. 17. 764. A.

<sup>b</sup> Ælian. c. 14.

<sup>c</sup> See Polyb. lib. 12. 664. C. Leo cap. 17. 591.

4 In ordinary array foure thousand cubits ] The Phalange in open order, saith Ælian, takes up 4096 cubits of ground. This is to be understood in front, or length; for in depth it hath no more, then 64 cubits; every souldier (which are in number, 16 in file) possessing a cubits of ground in his open order; A cubit is the part of the arme, which reacheth from the elbow to the middle fingers end, and is as much, as a foote and a halfe. In front then, there being 1024 File-leaders, we must allot to each of them foure cubits, of ground; to the thousand 4000 cubits, and to the odd twenty foure 96 cubits. For foure times twenty foure makes 96, which together comes to 4096 cubits, and to six thousand one hundred fortie foure footes.

<sup>d</sup> Suidas in Plectro.

<sup>e</sup> Suidas ibid. & Leo cap. 17. 599.

5 Ten furlongs and ninety six cubits ] Where this space is squared out by tenne furlongs; wee must understand, that a furlong contains <sup>a</sup> foure hundred cubits, and 4096 being divided by 400 the quotient is 10: — that is ten furlongs and 96 cubits, as Ælian saith. Which measure of ground the Phalange of armed taketh in open Order. Of these furlongs <sup>b</sup> seven and a halfe go to a mile, by which account the front of the Phalange of armed in open order taketh up one mile, a quarter, and 246 cubits, measuring it by fete it amounts to 6130. In closing (which is named Order, and is the next distance) because the souldier is allowed but 2 cubits, that is halfe so much, as in open Order, the dimension will not exceede five furlongs, 48 cubits; that is 2048 cubits in all, which amounts to halfe a mile, halfe a quarter, and 173 cubits, in fete, 3072. In standing 2 furlongs and a halfe, and 24 cubits; that is a quarter of a mile and 274 cubits.

### The arming of the Phalange.

#### CHAP. XII.

THE Phalange is to be armed with Target and Pike. The best Target is the Macedonian target made of brasie, and somewhat hollow, and having eight handfulls in Diameter. The Pike ought to be no shorter then 8 cubits; and the longest no longer, then a man may well use and wield in handling.

#### Notes.

IN the second Chapter of this booke was handled the diversitie of armes, used in the Phalange. This setteth forth the choice, that is to be made for matter and fashion, and what

what size is best of pike and target. For the other armor of the armed (whereof I speake, in my notes to the second Chapter) is (no question) to be fitted to the body of him, that shall be armed. He giveth then to the armed a target, and a pike, the targets the Macedonian are target. The matter whereof was first of brasie. I have shewed, that the Macedonian target was of brasie, and that they were called by reason of the bearing such targets Chalcipides Brazen-targets. I am induced to thinke, that, as Philip borrowed many other things in warre from the Lacedemonians, so he borrowed this kinde of target from them. For they by the ordinance of Lycurgus, were wonted to have no other matter in their target then brasie. <sup>a</sup> Xenophon gives a reason why they were made of brasie. For Lycurgus was of opinion, saith he, that such a Target was most fit for warre, because it is soone brought to shine, and it gathereth not rust easily, two great commodities in armes. For albeit the chiefest considerations be surenesse, and strength, yet is not the beauty to be neglected, which shining dash principally set out. Besides that it dazleth the eye of the enemy, and strikes an amazement in his minde. <sup>b</sup> Xenophon much admireth Agesilaus, that he so armed, and clothed his armie, that they seemed to be nothing, but brasie, and nothing, but scarlet. The brasie he speaketh of, were the brazen targets of his souldiers, which covered the most part of the body, and were chiefly the object of the eye, without that, that any other weapon was at that time of Brasie. Therefore, as I said, I am of opinion that the brazen Target came from the Spartans to the Macedonians. The Brazen-targets Ælian would have

<sup>2</sup> Somewhat hollow ] If they should beare straight out without any bowing, besides that they were uneasie, they would lie kicking out from the body, and not cover it much. The arme, or shoulder, that is inserted into the Target, is bowing. And the target somewhat bowing fits it for ease, and slopeth more toward the body to cover it, and is more pliable to be carried. But the hollownesse ought not to be much. He would have it also

<sup>3</sup> Eight handfulls in Diameter ] The Diameter in a circle is a right line, which is drawne from one side of the circumference to the other passing thorough the Center, or middle point of the circle, dividing the circle in two equal parts: Here the Diameter of the Target is taken for the exact breadth of the target; which ought to be, according to the Macedonian manner, eight handfulls, or two footes, that is 32 fingers. For foure handfulls go to a foote, and foure fingers to a handfull. <sup>c</sup> Leo gives it three Spithams, that is 36 fingers, if he meane the great Spithame; which is of twelve fingers. And the lesse comprehending a handfull he cannot meane. For so should the breadth of the target be no more, but three handfulls, a breadth insufficient to cover any mans body. Whether of them is the better will appeare in triall. The Diameter that serves to cover the bodie from the upper part of the necke to the middle part of the thigh, is enough in these round targets. That, which is more, is rather troublesome, then fit for use. And I am of Iphicrates judgement in targets, that performing the covering of the bodie, they should be as light, as may bee, least the shoulder be over-laden with unnecessarie weight. In which regard I preferre the Target of Ælian, before that of Leo; Ælians reaching up to the height of the necke from the middle of the thigh; Leos carrying a handfull more in breadth, which in the circumference groweth to a good proportion of weight and greatnesse.

<sup>4</sup> No shorter then 8 Cubits ] That is 12 footes. Short pikes against long have a great disadvantage. With the long pike a man is able to strike, and kill his enemy, before himselfe can be touched, or come in danger of a shorter, the pike keeping the enemy out so farre, as the length is. The experience of the battaile of Sorano, sheweth it; where Vitellozzo Vitelli discomfited the Almaines only with the advantage of pikes an arme longer than theirs. Against long pikes, this policie was used by Cleonymus the Lacedemonian King, as <sup>d</sup> Polienus tells. Cleonymus besieging Aedessa, and having over-

<sup>a</sup> Xenophon de rep. Laced. e86. A.

<sup>b</sup> Plutarch. in Crasso, c. Xenoph. in Agesilao. 619. B.

<sup>c</sup> Leo cap. 6. 528. <sup>d</sup> Polux lib. 7. cap. 8. <sup>e</sup> 322. collectit a spanne.

<sup>f</sup> Patricius Pa. rel. part. secunt lib. 7. cap. 8. <sup>g</sup> Polien. lib. 2. in Cleonym. 52.



## The Tactics

throwne the wall of the City, the pikemen of the City sallied out, whose pikes were each 16 cubits in length. Cleonymus closed his *Phalange* in depth, and commanded the file-leaders to lay away their pikes; and when the pikemen of the enemy came to charge, to seaze vpon their pikes with both hands, and hold them fast, and the followers to passe thorough by the file-leaders sides, and maintaine the fight. The file-leaders laid hold on the pikes, and the enemy strove to recover them out of their hands. In the meane time, the followers passing thorough the ranke of file-leaders to the front, slew the enemies pikemen, and got the victorie. *This was Cleonymus deuice against long pikes, which notwithstanding derogates nothing from the length of pikes more, than from shortnes. For the same policie might haue prevailed as well against short pikes, as long, each, as soone as the enemies haue seized vpon them, growing to be of no vse. But that the longer pike is to be preferred before the shorter, I haue shewed before by reason: and the reformation of armes made by Iphicrates amongst the Athenians, and by Philopomen amongst the Achaians, will be warrant enough so to hold. In the length notwithstanding ought to be a reasonable consideration, that it exceede not the measure of his strength, that shall beare the pike.*

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*The worth that the File-leaders, and next followers  
should be of*

### CHAP. XIII.

**T**HE *File-leaders* (as the Commanders of files of the *Phalange*) are to be the choice and flower of the Army, and to excell the rest as well in stature, as in experience and martiall skill. For this *Ranke* knitteth and binderh in the *Phalange*, and of all other yeeldeth greatest vse. For, as a sword taking to the edge as a weight, and sway, the swelling yron towards the backe exhibiteth thereby more violence in piercing, so in a *Phalange* the *Ranke* of *File-leaders* is the edge it selfe, and the multitude of after-commers is the swelling, and sway, and increafe of weight.

Consideration must be had likewise of those that follow in the second *Ranke*. For their *Pikes* reach ioyntly ouer the *front*, and being next in place they are alwaies ready for vse. And the *File-leader* falling, or being wounded, the next *follower* stepping to the *front* in his place, holdeth together, and preferueth the tenor of that *Ranke* vnbroken.

Furthermore, we are to order the third and the rest of the *Ranks* according to reason, and as the valour of our souldiers shall require.

**T**HIS Chapter sheweth how the Souldiers are to be ordered in euery File: whereof, because I haue before spoken sufficiently in my Notes to the fifth Chapter; and the words of this Chapter carry no difficultie, or obscuritie with them, I will forbear to treat any further.

### CHAP. XIII.

*Of the strength of the Macedonian Phalange, and length  
of the Souldiers Pikes.*

## CHAP. XIII.

THE <sup>1</sup> *Macedonian Phalange* hath of enemies beene thought vnresistible, by reason of <sup>2</sup> the manner of embattailing. For the Souldier with his Armes standeth in close order, or shutting, when he is ready for fight, <sup>3</sup> occupying two *Cubits* of ground. And the length of his *Pike* is sixteene *Cubits* according to the first institution, but in truth it ought to be foureteene *Cubits*; whereof the <sup>4</sup> (space betwixt the hands in charging taketh vp two *Cubits*, the other twelue lyē out from the *front* of the *Battaile*. Those in the second *Ranke*; that stand next to the Leaders (loosing foure *Cubits* in the *Phalange*) haue their *Pikes* reaching ouer the first *Ranke* ten *Cubits*. Those of the third *Ranke* eight *Cubits*, of the fourth *Ranke* six *cubits*, of the fift 4 *cubits*, of the sixt 2 *Cubits*. <sup>5</sup> The *Pikes* of the other behind cannot attaine to the first *Ranke*. And seeing fīue or six *pikes* are charged ouer the first *Ranke*, they present a fearefull sight to the enemy, and double the strength of the souldier standing fortified, as it were, with fīue, or six *Pikes*, and seconded with a maine force at his backe, as the figure sheweth. Moreouer they that are placed after the sixt *Ranke*, albeit they push not with their *pikes*, yet thrusting on with the weight of their bodies, r'enforce the strength, and power of the *Phalange*, and leaue no hope for the *File-leaders* to fīe, or shift away. Some would haue the hinder *pikes* longer, then the formeſt, that they of the third, and fourth *Ranks* might beare out the heads of their *pikes* equally with the first.

<sup>6</sup> The *Superordinary Lieutenant* of euery *Syntagma* must be a man of vnderstanding, overseeing the souldiers of his command, that they *file*, and *ranke*; and if for feare, or other occasion, any forsake their ground, he is to compell them againe to their places; and in *Closing* to put them (when neede requireth) as neare vp together, as they should stand. For it is a great strength, and assurance to the *Phalange*, to haue some principall *Commander* not onely in *front*; but also in the *Reare* of the *Battaile*, for the causes before mentioned.

## Notes.

THE strength of the Macedonian Phalange, which consisted principally in the <sup>a</sup> protection, and charging of pikes, and knitting together of Targets, is here <sup>a</sup> Appian. in set downe. The whole Chapter seemeth to haue beene taken out of <sup>b</sup> Polybius, who hand- <sup>c</sup> Syriacus 97. E. leteth the same argument, and almost with the same words, but that *Ælian*, and he differ <sup>b</sup> Polyb. lib. 17. 163. E. about the number of *Cubits*, which the *Pikes* take up reaching ouer the front of the *Phalange*.

<sup>d</sup> The Macedonian Phalange, hath beene thought to be vnresistible. The strength of the Macedonian Phalange appeareth no way better, than by the conquests it hath made. King Philip was the inuenter of it; and by that invention raised the kingdom of Macedonia from the poorest, to the powerfullst, and greatest kingdom of Europe; and (that I may use the words of <sup>e</sup> Diodorus Siculus, finding the Crowne, <sup>e</sup> Diod. Sicul. at his comming to it, in bondage to the *Illyrians* made it afterward Lady of many great Nations, and Cities; and purchased to himselfe, to be declared Generall of <sup>f</sup> Greece: <sup>f</sup> lib. 16. § 10.

d Diodor. Sic.  
lib. 17. 564.  
Plutarch. in  
Alexandro.  
Qu. Curt. de  
reb. gest. Alex.  
Iustin.

e Diod. Sicul.  
lib. 16. 541.  
Iust. lib. 8.  
f Dio. i. Sicul.  
lib. 16. 555.  
Plutarch. in  
Pelopida.  
Iustin lib. 8.  
g Diod. Sicul.  
lib. 17. 566.  
h Qu. Curtius  
lib. 4. 209.  
i Polyb. lib. 2  
151.  
k Polyb. lib. 17  
763. D.

l Plutarch. in  
Flamin.

m Plutarch. in  
Pyrrho.  
n Polyb. lib. 17.  
760. C.  
Plutarch. in  
Flaminio.

o Appian. in  
Synacr. 107. D.

p Plutarch. in  
Emilio.  
Livy dec. 5.  
lib. 4. 73.

Greece. And first overthrowing the Illyrians, Pæonians, Thracians, and Scythians, afterward set upon the kingdom of Persia to breake it, after he had enfranchised the Græcian Cities of Asia. And albeit death intercepted him, yet he left such forces to his sonne Alexander, that he needed no other Allies to overthrow the Souerainety of Persia. After his death<sup>d</sup> Alexander took his kingdom, and Armie, and with it encountering, and vanquishing Darius in two great Battails, runne thorough Asia like a flash of lightning renting a pieces all, that resisted, or stood in his way, and laid the foundation of that kingdom, which (albeit afterward divided) continued long in his Successors. Neither was the experience of their invincibleness against the barbarous people onely, but as much against the Græcians, who till Philips time were esteemed the chiefe masters of Armes in Europe. This is cleare by the victories, the Macedonians obtained against the renowned Cities of Greece both ioyntly and severally. <sup>e</sup> Philip overthrew the Phocéans, albeit the Lacedæmonians, and Athenians ioynd with them. The same<sup>f</sup> Philip at Cheronea defeated the power of the Thebans, and Athenians ioynd together. <sup>g</sup> Alexander took and sacked the Citie of Thebes, that about that time was accounted the mightiest Citie of Greece. <sup>h</sup> His Lieutenant Antipater foyled the Lacedæmonians in a set battail, and slew their King Agis. <sup>i</sup> Antigonus Tutor of King Philip the sonne of Demetrius, broke an Armie of the Lacedæmonians and Peloponnesians at Sclasia, and chased out of Greece Cleomenes the last brave King of Sparta. Briefly they were not beaten in the field by any Nation, but onely by the Romans. And yet the iudgement of<sup>k</sup> Polybius, doth in this also prove it selfe good. For where the Romans had these victories against the Macedonians, he assigneth this to be the cause, that the Phalange at the time of the fight had not the proper place, nor meanes to vse it owne power in the encounter; so long as the Phalange hath ground enough, and can meete the enemy with a right front, he holdeth it not possible to be foyled, being diuided, and in places vneuen, he is of opinion, and experience hath taught, it may easily be put in a route. <sup>l</sup> Plutarch compareth it for strength (so long as it is one bodie, and maintaineth the Synaspisme ioyntly) to an invincible beast; being disseuered, he saith, it looeth the force in the whole, and in euery man particular, both in regard of the manner of arming, and also because the violence of it confists rather in knitting of all parts together, than in particular of any mans valour. Three battails (to pratermis diuers skirmishes,) I finde the Romans had with, and therein foyled the Macedonians; One against King Philip, the sonne of Demetrius; an other against Antiochus; the third against Perseus the sonne of King Philip. <sup>m</sup> For I passe over those, wherein they were beaten by Pyrrhus, and had the worst. <sup>n</sup> Philip breaking his Phalange, and not vsing the whole together, but fighting against the Romans with the right winge onely, yet had the better, and was too hard for that part of the Roman Army, that ioynd with him; but the other winge coming into the field, fit rather for a march, than a fight, and not being able to order themselves Phalange-wise, were some defeated, and the Roman victorious; fell upon the reare of the right wing (where Philip was, and had now gotten the victory) and so wonne the field. <sup>o</sup> Antiochus vnskilfull in true ordering of a Phalange, trusted rather to his horse, than his Phalange, and being to fight with L. Scipio, where he should haue giuen full scope, and extended the front of the Phalange, by making it too deepe, he contrary-wise narrowed it, drawing out the depth into 32: whereby he lost the advantage of marching the front of the Romans, and after his horse were beaten, gave facilitie to the enemy of encompassing on it all sides. <sup>p</sup> Perseus ioyning battail with Paulus Emilius; as long as the Phalange continued in the right figure, slew many of the Romans, and forced them to retire, but following on too eagerly, he came to vne-

even, and rough ground, wherein the Phalange being disseuered, left spaces, and breaches for the Romans to enter and defeat it. So long then, as the Macedonian Phalange had fit ground, and the right property of embattailing, it stood fast against the Romans the greatest souldiers that euer were, being in their hands, that knew not how to vse it (as a sword in the hands of a childe) it yielded to time and fortune. The cause of the strength of the Phalange is assigned to be

2 The manner of embattailing ] Which consisteth principally in ordering of Targets, and pike; in closing of the Targets by Synaspisme, and in ioint charging of the pikes; which lying out thicke from the front, besides the horror of the fight, giue almost an impossibilitie to enter the Phalange. I haue alledged the iudgement of<sup>r</sup> Emilius concerning the fight presented by a Phalange, when the Pikes lie so charged out of the front. <sup>s</sup> Polybius thinketh nothing can resist the force thereof. <sup>t</sup> Livy, albeit many times more than partiall to the Romans, yet in the selfe-same fight betwene Perseus and Emilius giueth his iudgement thus of the Phalange: The second Legion (saith he) infinuated it selfe into the middle empty place, and so broke asunder the Phalange. Neither was there any more euident cause of victory, then the fights in diuers places at once, which first troubled the Phalange in turning many waies, and afterward plainly disioynted, and scattered it; whose forces being vniued and rough with charged pikes are intollerable. If by giuing on in diuers places you constrain it to bring about the pikes immouable through length and weight, it entangleth it selfe with confused crossings. If at one time you charge it both flanke, and reare, they fall asunder like a ruinous building. As then they were compelled many waies to answer the Romans, and so to breake their battail into many parcells. And the Romans vpon the first opportunite of a breach straight waies conueighed in their troups, who if they had met the enemy in front, had runne vpon the pikes, as in the beginning it hapned to the Pelignans, being too forward to come to hand, and could not haue resisted the Phalange fast shut, and serred up for the encounter: thus Livy concerning the Phalange. Who albeit a Roman; holdeth the same opinion that Polybius doth. <sup>u</sup> And in an other place telling of Philips encamping, he saith, he was lodged in a woody plot, which was vnfit for the Phalange, especially of the Macedons, which vnlesse it cast the pikes, as it were, a muniment before the Targets, (and that cannot be, but in open ground) is of no great vse. So then if Pikes may be charged out before the Targets, the Phalange is of great vse. But, that I may not seeme, to rely vpon bare opinion, let vs heare by an example, or two, the experience of the Pike, and Target of the Macedonian against the Roman armes. <sup>v</sup> When T. Quintus Flaminius the Rom. Consull had drinen King Philip, and his army from the streights neare Antigonie, seeing that the enemy kept himselfe with his strength, and abstained from the field, he determined to try the Cities of Theffaly; and hauing wonne some by force, some by feare, he came before Rhage, and besieged it. He found the sieg longer, and more difficult, then any man would haue thought. And the enemy made his resistance, that way, the Consull would hardly haue beleueed, he could. For he imagined that all his labour should be in throwing downe the walls. If once he found passage for the Army to enter, there would after be nothing else, but flight and slaughter, as is wont, in walled Cities. But after that part of the wall was throwne downe with the Rammie, and the Armie entred the Citie by the breach, it was the beginning of a new and fresh labour. For the Macedonians, that were there in Garrison, being many, and chosen, thinking it also a glory to them, if they could defend the Citie, rather with

H 2

armes

armes and valor, than with walles, *ferring* themselves close together in a deepe *Phalange*, when they perceived, that the Romans began to enter the breach droue them out, the place being cumbersome, and hard to make a retreat. The *Consul* much offended therewith, and thinking that shame concerned not only the delay of winning one Citie, but also the state of the whole warre, (which for the most part dependeth vpon moments of small matters) purging the place which was heaped vp with the fall of the halfe-ruined wall, advanced a Tower which in many stories was stuffed with multitudes of armed men, and sent besides *Cohorts* vnder their Ensignes to breake with maine force (if it were possible) the body (they call it the *Phalange*) of the Macedonians. But the kinde of weapons and fight was more aduantageous for the enemy, than for the Romans; especially in that place, which was narrow, and streightned with the small space of the ouerthrowne wall. When the Macedonians, *ferring* themselves close, had charged pikes of a great length before their front, and the Romans, after their darts throwne in vaine against the *Tessudo* compacted, as it were, of the thicke knitting together of the Targets, had drawne their swords, they could neither come vp close, nor cut a sunder the pikes. And in case they cut the heads of, or broke any, the steale amongst the rest of the whole pikes filled vp the roome with their sharpe fragments. Ioyne that that part of the wall, which was yet whole, secured the enemies flanks on both sides; neither needed they much ground in retiring or advancing to charge, which things are wont to cause the breach of array. There also fell out a chance which increased their hopes, and spirits. For the Tower being driuen on vpon a rampier, that was not well rammed vnderneath, but had loose earth, one of the wheelles sinking deeper into the ground than the rest, made the Turret to nodd, & lie of one side, that both the enemy beleued it would fall, and they within it were put in a pitifull feare. When nothing succeeded well, the *Consul* was euill appaied, that the Macedonian souldiers, and kinde of Armes, might seeme matcheable to his, and seeing no great hope of speedy winning the Citie, and that the place was vnfit to winter in, raised his siege. So here the Macedonian souldier is not onely equalled, but also preferred before the Roman, and that onely by reason of his armour, the Pike and Target. An other experience fell out in the battaile betwixt Perseus, and *Emilius*, whereof I speake in this Chapter. The storie is this: The Romans coming to ioyne battell with the Macedonians, and not able to come vp to them by reason of the length, and ioint out-bearing of their pikes. There was one *Salinus* a Captaine of *Pelignans*, who tooke the Ensigne of his Company from the Ensigne-bearer, and threw it into the Macedonian *Phalange*. The *Pelignans* ranne in heapes to the place (for it is not lawfull, nor honest, for the Italians to forsake their Ensignes) where the medley brought forth wonderfull effects. For the *Pelignans* fought with swords to put by the pikes, and to presse them downe with their Targets. And seizing vpon them to pull them out of the handes of the Macedonians. The Macedonians contrary-wise, maintaining their charge with both hands, and striking such, as approached neare, thorough the bodies, armes and all, neither Target nor Carace, being able to sustaine the violence of the blow, turned topsy-turvy the bodies of the *Pelignans*, who not with reason, but with the rage of wilde beasts, threw themselves desperately vpon wounds, and vpon certaine, and fore seene death. So the foremost falling, the followers began to slacke. And yet they fled not, but retired to the mount called *Oclarus*. I will out of *Appian* ioyne a third experience in the battaile of Antiochus against

*Plutarchus* in *Emilius*.

*Appian*, in *Syriacis*, cap. B.

against *L. Scipio*, which I likewise touched before in this Chapter. As soone, as the Horse, and Chariots of Antiochus were put to flight by the Roman horsemen, and by *Eumenes*, his *Phalange* of foote being delittive of horse, first opened, and received the light-armed, (that had all this while fought in the front) into the midst of it. Then after-ward againe closed. And when *Domitius Scipio's* Lieutenant, incompassed it round with horse and light-armed, which he might easily doe, by reason it was thrust vp into a thicke *Plinthum*; it was driuen to great distresse; being neither able to charge the enemy, nor yet to countermarch in so great depth, as it carried. It grieved them much, that their long experience nothing auailed them to annoy the enemy, and that notwithstanding they were subiect to arrowes, and darts at all hands. Yet, bearing out a multitude of pikes on euery side of their square, they called the Romans to come to handy blowes, and still made a countenance, as though they meant to charge, keeping themselves for all that within their Ranks, as being footmen, and heauy armed, and the rather, because they had to doe, with an enemy on horse-backe. Besides they were loth to breake the thicknes of their battaile, which forme they could not now alter. The Romans also, durst not approach them, and come to sword, fearing their experience in warre, and closeness of array, and desperation. But running about here, and there, plied them with arrowes, and darts, whereof none was throwne in vaine, falling amongst a troupe so closely put vp together, that they could neither auoide, and decline any thing throwne, nor giue way, albeit they saw it coming. At last being weary, and irresolute what to doe, they retired easily, with a threatening countenance notwithstanding, and in good order, and not deliuering the Romans of feare, who durst not yet come neare, but sought to annoy them aloofe; till the Elephants placed in the Macedonian *Phalange*, being affrighted, and not to be ruled by their Gouvernours, troubled all, and gaue occasion of flight: hitherto *Appian*. Out of these three examples, the truth of that, which *Eliau* saith, is to be seene, that is, that the Macedonian *Phalange* cannot be forced, or resisted by an enemy, (saking with all *Polybius* his caution) if it be in the right posture, and figure, and haue such ground, as is fit. The Romans the best souldiers of all antiquitie were repulsed by it at a siege, forced to retire in a battell, durst not come neare it, after they had gained the field of the rest of the Army. And the *Consul* *Emilius*, a man that had seene much seruice, and fought many battailes, and was one of the best Generalls of that time, confessed, he neuer saw to fearefull a sight, as when he beheld the *Phalange* advancing into the field, the bodies ioynd, the Targets serred, and locked together, darting out fire like lightning, the front rough with couched, and charged pikes, and armed with yron, and threatening present death to him, that durst approach.

3 Occupying two Cubits of ground ] We may not take it, as though the souldier betwixt file, and file had two Cubits, or three foote of ground. For we learned before that in locking vp the *Phalange*, the distance betwene man, and man in front was but a Cubit. But it is to be vnderstood betwene ranke and ranke. For *Polybius* saith, that the souldier ought to haue room for the vse of his weapon, which cannot be, without granting him three foote behinde, the pike being sometimes to be pushed forward, sometimes to be drawne backe, sometimes otherwise handled, as occasion of fight shall require.

The length of the Pike is 16 Cubits ] Sixteene Cubits, which is twenty foure foote, is a great length for a Pike, and it verifieth the words of *Livy*, 5.3. & cap. 6. that the Macedonian Pike is vnwealdy, by reason of the length, and weight, 5.37.

H 3

yet

b Polyen lib. 2. yet doe wee read of pikes of that length. The <sup>b</sup> Adellians had such. The <sup>c</sup> Chalybes pikes were about 15 cubits long. <sup>d</sup> But 16 was the length at the first, the Macedonians brought it to 14, which they tooke to be a sufficient length against the enemy, and easier for the Pike-man to beare and handle.

4 The space in charging betwixt the handes taking vp two cubits ] Herein is a difference betwene *Ælian*, and *Polybius*. *Ælian* would haue no more, then 2 cubits lost in charging; <sup>e</sup> *Polybius* saith 4. are lost, and with *Polybius* agreeeth *Leo*. But the cause of the difference ariseth out of the forme of the pike, and of the manner of holding it in the charge. If it be held at the butt end with the right hand, and supported toward the armed end with the left, as the manner in charging is, it cannot loose above two cubits, and *Ælian* is in the right. But if, in holding it, you set the right hand 2 cubits from the butt end, then must 4 cubits of necessity be lost. Whereof 2 rest behinde the right hand, the other two are taken vp by the space betwixt both hands. Our manner of charging is at this day, to take the butt end in the right hand, and in so doing we loose but two cubits. But it seemeth our pikes are not made in that forme, they were in *Polybius* time. In *Polybius* age they had weight at the butt end to make the sharpe end the lighter, as the heauie pummell lighteneth the sword in handling. <sup>f</sup> This weight was called <sup>g</sup> *scroma*, as it were a counter-weight to the heauinesse, and length of the pike. Neither do I read any thing elswhere then in *Polybius*, concerning the counter-weight of a pike. To the handle of an Oare, I finde in <sup>h</sup> *Athenes*, that lead was added, to make the part standing out from the shippe more light. But yet *Polybius*, and *Ælians* opinions may well agree, and in pikes that haue counterweights at their ends (the hold for charging being taken two cubits from the butt end) there may be lost foure cubits, where the other sort being held as the butt end it selfe, loose but 2 cubits.

5. The pikes of the other behinde, cannot reach to the first ranke ] How shall they beare their pikes then? <sup>k</sup> *Polybius* sheweth, what the manner was. Those ranks, saith he, that stand behinde the fifth, can helpe nothing to the fight in front. And therefore they charge not their pikes low, but beare them towards their forestanders shoulders, the points somewhat erected to secure the battaile from above, intercepting by their thicke lying the misseue weapons, which flying ouer the front, would otherwise fall vpon their heads, that are placed toward the reare. *Polybius* saith, the manner was, (neither to charge, nor order their pikes, but) to beare them forwards sloping towards the shoulders of their companions before. Yet by bearing them so, what security they could giue from the misseue weapons, that came aloft, I cannot yet conceiue. An arrow, dart, or stone, vnlesse it hit iust on the middelt of the pikes, would do as much, and sometimes more, harme by glancing, then if it had not touched them at all.

Some would haue the hinder pikes longer ] The opinion of them, whom *Ælian* here speaketh of, hath little reason to ground vpon. For either the pike of them that come in the furer ranks behinde, especially the two last must exceede in length, or else the file-leaders pikes in shortnesse, both which are alike vnprofitable. If they be too long, they cannot be wielded, if they too short, the enemy shall reach the file-leaders, and not the file-leaders the enemy. The measure of the longest pike was 16 cubits, which yet for apperance and use was by the Macedonians reduced to 14. Say then the sixteenth ranke carrieth pikes of 16 cubits; two of the cubits according to *Ælian*, are taken away in handling, other ten by reason of the distance of the furer former ranks. Foure cubits alone remaine, and reach ouer the front. If the file leader in the front shorten his pike to foure cubits to make an even extension, he shall not come neerer the enemy by ten cubits, who in pushing will reach home to him. For what length sooner, is taken from the file-leader in front,

front, the same is giuen to the enemy, that pusheth with him. And hee shall bee able to wound the file-leader, and not the file-leader him, especially the pikes differing in so great a proportion.

6 The superordinarie Lieutenant of euery Syntagma ] I haue before noted the dutie of a Lieutenant of the Syntagma, and it is here well expressed by *Ælian*. He; that desireth to see more touching the same, let him resort to *Xenophons Cyropædia*: lib. 3. 28. and lib. 7. 178. B. and to *Leo*, cap. 14. § 79.

The place of the light-armed, and the number of euery file.

#### CHAP. XV.

Thus much of ordering and marshalling the armed-foote. I will adde a word, or two, of the light-armed, or naked. <sup>1</sup> The Generall is to place the light-armed so, that they be ready for all attempts of the enemy, sometime in front, sometime in flanke, sometime in the Reare, according to occasion or necessity. For our purpose let them be thus ordered: We will frame also of them 1024 files as many, as the *Phalange* of the armed contained; So that the first file of the light-armed be placed directly behinde the first file of the armed, and the second file behinde the second, and so the rest. <sup>2</sup> Yet shall they not be sixteene to the file, but halfe so many, namely eight; so that in 1024 files there shall bee eight thousand, one hundred, ninety two men.

#### Notes.

<sup>1</sup> Hitherto all things concerning the arming, filing, embatteling, number, command, distance and precedence of the armed are declared; and likewise, of the arming of the light and somewhat of their place. Now followeth the filing, ranking, and place more exactly, and their manner of embattailing, with their severall bodies, and commands.

<sup>2</sup> The Generall is to place ] I haue spoken somewhat before of the placing of the light. I will now onely adde a passage of *Leo* tending thereunto. <sup>3</sup> *Leo* saith thus, you shall range the Archers behinde the reare of euery file according to the number <sup>4</sup> of the file, (that is foure light for twenty six armed, proportioning an Archer for euery foure armed. Or if it be needfull, you shall order them within the files, an armed, and an Archer. Sometimes without the wings of the battaile; that is within the Horse. Oftentimes without the Horse a little distance, with a few Targetiers, to defend the vitermost flanks of the Horse. And this is to bee done, when you abound in multitude of light-armed. But those, that vie small darts, and iavelins, and such like are to be placed, either in the reare of the armed, or in the wings of the battaile, and not in the middelt. The slingers are alwaies, to bee set in the wings. Thus *Leo* placeth his light armed. But *Ælian* here (as before in the *Generalis Chapter*) designeth their place in the reare, but so, that hee leaueth it to the Generalls choice, and to the occasion of service to place them, as most besiteth. Being set behinde, as *Ælians* order is, they must answer the armed in number of files; & be directed by the files of the armed for their standing; that is euery file of the light-armed is to order it selfe in a right

right line after a file of the armed in such manner, as the armed are before embattailed.

Ælian in the beginning divided the foote into three parts, Armed, Targetieres, and light-armed. To the armed he hath given place, and maketh the Phalange to consist of them, the light-armed he rangeth in the reare of the armed, what shall become of Targetiers? for he speaketh not a word of placing them. By that I read in Ælian I would think, they were placed amongst the light-armed, and next to the armed. First because Ælian saith, many number them amongst the light. Then I see the Hypaspists placed betwixt the Horse, and the armed in Alexanders fields, at Granicus, at Issos, and at Gaugame-la; Lastly Leo in the passage before recited, when he placed the light-armed without the Horse, he joyneth Targetiers with them, for their safeguard. Cyrus likewise placeth them next the armed in the reare; and after them the Archers.

2 Yet (shall they not be 16.) The file of the light-armed is lesse in number, then the file of the armed. For if they should be 16 in file, the number being but halfe to the armed, they should not be able to make above 512 files, and breeding there by a disproportion both in placing, and correspondence one to another, not equall the length of the Phalange. Besides standing eight in file, and in the reare, their flying weapons will bee sent with more force against their enemy; In as much as the hindmost of them are neerer the enemy by twentie foure foote, which the last eight in a file of 16 deepe take vp. And mil-lieue weapons, the lesse their compass is, when they are sent against a marke, with more violence they pierce. As they hurt not greatly, if the distance be too farre, from whence they come.

The names of the bodies of the light-armed.

#### CHAP. XVI.

Their names and degrees are these. Foure files of light-armed are called 1 a Syntaxis of 32 men. Two Syntaxes 2 a Pentecontarchy of 64 men. Two Pentecontarchies 3 a Century of 128 men. In every Century ought to bee 5 Superordinarie men: an Ensigne, a Reare-commander, a Trumpetter, a Serieant, and a Crier. Two Centuries containe 256 men, and are called 4 a Psilogy. Two Psilogies 5 a Xenagy of 512 men. Two Xenagies 6 a Systemma of 1024 men. Two Epixenagies 7 a Stiphos of 4096 men. Two Stiphos an Epitagma of 1024 files, 8192 men. These ought also to haue 8 Superordinarie men, whereof foure should bee Epixenagies, the other foure Systemmatarchs.

#### Notes.

As the armed were distinguished, and siewered into diuers bodies in the Phalange, so are the light-armed, in whom there ought to be no lesse order, then in the armed. A multitude undigested bringeth with it disorder, and confusion. Neither can any service be expected from them, who by apt diuisions are not cast into bodies fit for seruice. We haue before spoken of the names of the bodies of the armed, and noted, that they were not imposed with such propriety, that they could be applied to no other thing. At the first warre was made, and men fought (as wild beasts grapple together) led with furie, and rage, and not with skill: and he preuailed that was the strongest. Experience taught there were aduantages in Time, in Place, in Order, in instruments of fight, in placing of men, and

in

in other circumstances. Hence sprung the Art of Warre, the diuers formes of weapon, and the figures of Battailes. For the speedy framing whereof, the smaller bodies were invented, of which they consist. In building of a house, you first bring timber together, and other matter, and then of it frame walls, doores, windows, rafters, beames, and the roof; which must be all conioyned together, before the fashion of the house will appeare: So in an Army the prouision of men was first requisite, which being found, and brought together by Leauies, were armed, and after ordered into seuerall bodies; and these being compacted together, set out the frame and fashion of the Phalange. And as all things newly invented, stand in neede of names to ascerne them from other things; So names were giuen vnto the bodies not proper, and fit; but such as Military wits thought convenient enough to signifie the things they meant. I haue noted it before in the names of the Tetrarchy, Taxis, Syntagma, and other, and it will appeare againe in this Chapter.

But here I may not pratermit the curiositie of the Græcians in their appellations, and their plenty of speech, apt to giue diuersitie to things, that are diuers. For where there are bodies, amongst armed, and light-armed, which consist of the same number, and therefore, as it seemes, might well enough haue bene comprehended vnder one name, they notwithstanding to auoide confusion, and for perspicuities sake haue thought good to call them by sundry names. Thirty two armed men are called a Dilochi; 32 light armed are a Systalis; 64 armed are a Tetrarchie; 64 light armed a Pentecontarchie; 128 armed a Taxis; 128 light, a Hecatontarchie. Our tongue will not afford such variety. For albeit in common speech we distinguish the kinde of souldier, yet confound we the name of the body, and of the command. A certaine number of Pikes vnder a Capitaine we call a company of Pikes; So many shot vnder a Capitaine we likewise call a company of shot. The Capitaines, one a Capitaine of Pikes, and the other a Capitaine of shot. A company of Curacers of horse, we call a troope of Curacers; as many Argoleters, a troope of Argoleters. The Commanders of either of them we terme Capitaines, the one of Curacers, the other of Argoleters. But let vs come to particular explication.

1 A Systalis ] It commeth of Synistemi to stand together: and a systalis is a standing together; which word albeit it may be extended to any kinde of people assembled, and standing together; yet it is here appropriated to souldiers; and more particularly to 4. files of light armed, consisting of 32 men, 8 men going to the file.

2 A Pentecontarchie ] The command of 50 men. And so it was vsed of olden. But the Macedonians gaue 64 men to this command, and yet reteined the name, because it was familiar, and well knowne.

3 A Century ] Ælian calleth it a Hecatontarchie, the command of a 100 men. The name was vsual before the Macedonians time, and it conteyned 100 men. But the Macedonians gaue it 128 men. This was answerable to the Syntagma amongst the armed, and had the like officers. Yet whether it had a Capitaine, or no, may be some doubt; the rather because Ælian in this Chap. nameth no Commanders, but Sytrematarchs, and Epixenagies; and thos he would haue super-ordinary. For my part, I thinke they had Centurions also. For as euery body of the armed had a head, so I would thinke it requisite also amongst the light-armed, especially seeing there was a Bringer-yp, and other officers belonging to a Company; which wilese they had a Commander, would become vprofitable. For if there were no Capitaine, to whom should the Crier, or Trumpet, or Sergeant of the Centurie resort for direction? Adde, that the light were often drawne to the winges, to the front, or other places of service, which could not be done without Leaders. For to put a Sytrematarch, or an Epixenagic to lead a Century, were to leaue the rest of the Centuries vnder them without a Commander. Besides, the

the Macedonians were very particular in their commands, and left no body without a head; which is the cause of the multitude of Commanders in the Phalange. But they are not here mentioned. No more are the <sup>a</sup> Commanders of the horse in the division of the

a after cap. 20.

b Xenoph. de  
exped. Cyri.  
lib. 1. 370. D.  
c Xenoph. de  
exped. lib. 4.  
322 D.  
d Arrian. lib. 1.  
9. C.  
e Arrian. lib. 1.  
55.  
f Arrian. lib. 1.  
23 B.

bodies of the horse, and yet I thinke no man will doubt, but the horsemen had Commanders. Lastly, I finde in the Grecian historie, Captaines of the light-armed often named. <sup>b</sup> Episthenes is said to be Commander of the Targetiers, in a fight the Grecians had against the Persians. <sup>c</sup> Stratocles commanded the Cretan Archers in the returne of the Grecians out of Persia. <sup>d</sup> Eurybates Captaine of the Cretan Archers in Alexander's army was slaine by the Thebans at the siege of Thebes. <sup>e</sup> When Antiochus the Captaine of the Archers was dead, Ombio was chosen in his place. Mention is made also in <sup>f</sup> Arrian of Clearchus the Captaine of the Archers. And when *Ælian* calleth the 4 Sytremmatarchs, and the 4 Epixenages superordinary (Ectactous) he might have said as much of all the other Commanders. And he saith expressly of the officers of the Centurie, that they were superordinary (Ectactoi).

4 A Pylagi] The word is a body of light-armed. Which word, if it were taken, as it naturally signifieth, is common to, and comprehendeth all the bodies of the light-armed, whereof *Ælian* speaketh in this Chapter. But here it is restrained to a body of light-armed, which compriseth 256 men, and 32 files, and so it is to be taken.

A Xenagie] That is, a command of strangers. *Ælian* before saith, that a Syntagma was by some called a Xenagie. I have given my opinion there of the original of the word, which I neede not to repeat here; This onely I will note, that of all the bodies of the light-armed, no one hath a common name with the body of the armed, but onely the Xenagie. And *Ælian* giveth also that body of the armed another name, calling it a Syntagma. The Xenagie hath in it 512 men, and 64 files.

A Sytremma] <sup>e</sup> It signifieth a conglotation, or trouping together. Proper names are wanting for these bodies, and therefore such taken, as might at any hand signifie the thing meant. In continuance of time use hath gained a passage, and made them to be accepted as proper nouns. The Sytremma containeth 1024 men, and 128 files. There is nothing to be found in *Ælian* of the Chiliarchie of the light-armed; Yet doth <sup>b</sup> Arrian mention 2 Chiliarchies of Archers in the Army of Alexander.

An Epixenagie] A command above a Xenagie; As afterward in the command of the horse, there is an Ephipparchie above a Hipparchie. The word is improper and hard enough; but when it is received by use, what should we seeke for more? It containeth 2048 men, and 256 files.

A Stiphos] It is derived from steibo, to thicken, and in pendency of an other name, this body of the light-armed is called Stiphos, because they are thickened, and thronged together. There is in it 4096 men, and 256 files.

An Epitagma] Is the last body amongst the light-armed. The signification of Epitagma is to place behinde. From thence cometh Epitaxis, placing the light-armed in the Reare, which word is after used by *Ælian*. Epitagma is derived from the same fountain; and it is called Epitagma, not of placing behinde, (for sometimes they were placed before, sometimes in the flanke) but it was the best name they could give to the whole light-armed. And yet it may be, that because all the light-armed in ancient time were placed behinde, the whole masse was called Epitagma, as being placed after the armed in the reare. The Epitagma hath in it 1892 men, and 1024 files, for so many light-armed attend the Phalange.

Eight superordinate men] Why these eight men should be superordinate more than the rest of the Commanders, I conceive not yet. If *Ælians* meaning be, that these alone shall command the light-armed, historie and practise of ancient times convince the contrary.

d after cap. 31.

contrary. Besides where he nameth foure Epixenagies, it agreeth with the number, that are in the Epitagma of light. But where he addeth foure Sytremmatarchs more to make up the number of the eight Superordinate, it is hard to knowe, which foure he meaneth, considering there are eight Sytremmas in the Epitagma.

Now because the files of the light-armed are in embattailing to be marshalled to the files of the armed, I thought good to set downe how the bodies of both agree, by comparing them together in files, not in number of men. For in number of men they cannot well agree, because the file of the armed hath more, then the file of the light-armed. And the number of the armed in grasse is 16384, of the light-armed but 8192. And I will first begin with the Sytaxis, because it is the least body of the light.

The bodies of the armed,

A Tetrarchie  
A Texia  
A Syntagma  
A Pentecostarchie  
A Chiliarchie  
A Merarchie  
A Phalangarchie  
A Diphalangarchie  
A Tetraphalangarchie

The bodies of the light-armed.

A Sytaxis,	4	files.
A Pentecostarchie,	8	files.
A Hecatomarchie,	16	files.
A Ptilagie,	32	files.
A Xenagie,	64	files.
A Sytremma,	128	files.
An Epixenagie	256	files.
A Stiphos	512	files.
An Epitagma	1024	files.

The use of light-armed foote.

## CHAP. XVII.

Darters, Archers, and all other, that vsing flying weapons, are good to begin the fight to prouoke the enemie, to breake and shatter armour, to wound, annoy, and beate downe a farr off; to disaray the enemy, to repulse their horse, to beat in their light-armed, to discouer suspected places, and to lay Ambushes. Lastly these first vnder-taking the Skirmish, and continuing it with the rest, and seconding them, and seruing for speedie, and farr off attempts; worke many, and great effects in fight.

Notes.

The arming, place, filing, bodies, and command of the light-armed are hitherto handled: Now followeth the use, and seruice they performe in the field. And first we are to thinke of the bodie of an armie, as of the body of a man; that is compast of several parts: Of which some parts are of more use then other; some being able to performe their function without the helpe of the other, some except the other helpe, can doe nothing to purpose of themselves. The parts of an armie are like. The armed are the strength of the field, and are therefore for the rest in extremitie. The light, joined with the armed, worke great effects (those which *Ælian* speaketh of in this Chapter and many more) without them they cannot so much as maintaine a place in the field. And as *Xenophon* saith, a Xenoph. Cy. lib. 7. 188. C. But they be neuer so many in number, yet dare they not stand or abide a fewe armed. In which respect, a place fit hath alwaies bene sought for their seruice, so secure them from the access of the Horse, or of the enemies armed. Which place was either be-



hinde the Phalange (as *Ælian* here would haue it) or else in the wings betwixt the Horse, and the armed, or if they skirmished loose before the front, and chanced to bee pressed with the enemy, they retired into the intervals, and conueied themselves be the Phalange in safetie. <sup>b</sup> *Leo* saith, if there be any place of strength, it will much helpe the light-armed. For after their flying weapons spent, retiring thither, they will be in more securitie, as a steep rockie place, or the bancke of a riuer, or a high hill, or such other. Our stories report, that at the battaile of Agincourt in France 200 English Archers were beset in a meadow fenced with a deepe ditch; from whence they so gauled the French horse and foot, that they were a great helpe to the victorie. The like happened before at Poitiers; where that braue Prince of Wales eldest sonne of Edward the third, hauing to fight with the whole power of France vnder the leading of their King, gaue safeguard to his Archers, with hedges, and ditches, and other strenghts. So that the French horse hauing no access to disorder them, were overwhelmed with the tempests, and stormes of their arrowes, and such a victory obtained by our nation, as might match the most renowned of all antiquitie. To say nothing of the inuention which *Henric* the fifth used against the horse of France for securing his Archers. The storie saith, he deuised stakes of two yards long, and armed both ends with pikes of iron, the one to sticke into the ground, and the other to gall, and enter the horses bellies, in case they came to charge our Archers home. By means whereof he caried the famous victorie of Agincourt. This for the assurance of the light armed, when they come to fight, without which assurance, their seruice would be weake, and scarce worth the hauing. Their seruice then according to *Ælian* hath many particulars. And they are good to

Prouoke the enemy] If the enemy be in a wood, a fenue, a hill, a fort, a towne, or other place of strength, that admitteth no access, the manner hath beene to send out the light armie to shew themselves, and with a brumado to towle him out of his aduantage, and bring him into the field, where he may more easily be dealt withall. Examples are plentifull, but I will content my selfe with a Macedonian example. <sup>c</sup> Alexander leading his armie against the *Triballs*, that had hid themselves in a wood, commanded his Archers, and Slingers to ruane out, and to shoote, and sling amongst the Barbarians to see, if he could towle them into the plaine. The Archers, and Slingers spared not to let flie, and the *Triballs* being wounded with arrowes, threw themselves out of the wood with all speed, to fall vpon the armed Archers. Alexander presently commanded *Philotas* with the Horse of vpper Macedonia to charge the right wing, on which part they cast out themselves furthest. And *Heraclides*, and *Sopolis* with the horse of *Bottia*, and *Amphipolis* the left, himselfe stretching out in length the Phalange of foote, & setting the rest of horse before the Phalange, led against the midst of the enemy. As long as it was but a skirmish, the *Triballs* had not the worke. But after the Phalange close serred, came vp roundly to them, and the Horsemen charged them no longer with darts, but pressed, and ouerboare them with their horse, they fled thorough the wood to the riuer.

To beginne the fight] <sup>d</sup> *Leo* agreeeth. If saith he, we haue light-armed enough, let them, before the armie ioyns, send their darts, and arrowes at the enemy, and after the fight of the armed is begunne plie the flanke with their misse weapons, that at once both their flanks may be assailed. It hath beene and is now the ordinarie course to beginne the fight with the light-armed. And because wee shall read of no battaile almost wherein it was not so, I will forekeare examples.

To wound a farre off] The light seruie is great purpose, if the Generall desire not to come neere to fight, but seeke to annoy his enemy a farre off without danger of his owne folkes. *Liuy* telleth of *Cn. Manlius Volso*, that being to make warre against the Gallo

Græcians,

Græcians, that fled into the mountaines, and awaited the Romans there, and sought to defend themselves, by aduantage of the place, he prepared great plenty of darts, arrowes, bullets, and small stones for Slinges: and leaving his legionary souldiers behind, led his light armed, against the enemy, that possessed certaine straits, by which his armie must passe. After some fight the Gallo-Græcians being not sufficiently armed, to defend their bodies from the misse weapons, the light-armed of the Romans forced the passage. And following them euen to the Campe, where their Companions came to their aide, they first drove them into their Campe, and after the Legionary Souldiers coming up, they wonne it. I haue before rehearsed the historie of *Iphicrates*, who with his Targetiers (that came seldom to hand blowes, but plied the enemy with darts a farre off) ouerthrew and steele a whole Moira of the Lacedemonians. The Acarnans, likewise with this kinde of fight, much incumbered *Agelilaus*, that made an excursion into their Countrey. The story is this, <sup>e</sup> *Agelilaus* hauing taken a great prey, in the territory of the Acarnans, rested that day, where he had taken it, being busie in selling of it. In the meane time many Acarnan Targetiers assembled themselves together, where *Agelilaus* was incamped vpon the side of a mountaine, and with darting and slinging, they forced his Campe to descend to the plaine, themselves in the meane time being free from hurt. The next day *Agelilaus* led away his armie. The passage out of the place was straight, by reason of the mountaines lying about in a circle, which the Acarnans possessing, plied the Lacedemonians with darts, and stones, from the higher ground, and sometimes descending to the skirts of the hills, they pressed the armie so, that it could not move forward. And when the armed, foote, or horse, fell out vpon them, they prosted little: For the Acarnans retired immediately, to their strength. *Agelilaus* perceiving it would be hard for his armie to winde out of those straits, so long as the enemy so hung vpon them; resolved to charge those on his left hand. For the ascent on that side was more easie, both for his horse, and armed foote. Commanding therefore, his men to charge, the armed of 29 yeetes of age first fell on; and the horse after them vpon the spurre. Himselfe followed with the rest. The Acarnans therefore, that were descended, and busie a darting, were quickly put to flight; and many slaine in seeking to remount the hills. But their armed foote, and most of their Targetiers, stood imbatailed on the toppes, and from thence both threwe other misseus, and lanced lauelines, wherewith they wounded horsemen; and killed some horse. But being ready to be charged by the Lacedemonian armed, they fled, loosing some 300 in the flight. These light-armed then, as long as they can keepe aloofe from the enemy, annoy them sore by wounding (as *Ælian* saith) a farre off; as some as the armed come vp, they are glad to quite their place, and saue themselves by flight.

4 To disarray] So long as a battaile remaineth in order, no victorie is gotten against it. Breaking of array, and disbanding, are companions of flight, and of forsaking the field. The armed, that are to endure the efforts of the light armed, must either keepe still their order, and suffer themselves, to be knocked downe, and slaine, as they stand, or else provide for themselves, by flight, or by yielding. For the light-armed effect with their misse weapons the one, or the other. An example may be scene in the Egyptians in *Cræsus* his battaile, who after the defeat of the rest of the armie, maintained yet the fight, and yielded not to *Cyrus*, though he had now the victorie. *Cyrus* at the first charged their backs with his horse, and being not able to breake them, was faine to command his Archers, and darters, to shoote and cast their darts at them: whereby the Egyptians after many wounds, and losse of their people, were finally constrained to yield. A like example is before alledged of *Domitius* the Lieutenant of *L. Scipio*, who with misse weapons alone forced the Macedonian Phalange to scatter, and take themselves to flight.

To

<sup>b</sup> *Leo* cap. 14.  
<sup>s</sup> 105.

<sup>c</sup> *Ælian* lib.

<sup>d</sup> *Leo* cap. 14.  
<sup>s</sup> 104.  
<sup>c</sup> *Liuy* Decad.  
<sup>s</sup> lib. 2. 39. 8.

<sup>e</sup> *Liuy* Decad. 4.  
lib. 8. 16. 1. B.

<sup>e</sup> *Xenoph. hist.*  
*Græc. lib. 4.*  
<sup>s</sup> 113. D.

<sup>e</sup> *Xenoph. Cy.*  
<sup>s</sup> 10. lib. 7. 178.

<sup>f</sup> *Ælian* in  
*Synocris* 109. B.

5 To repulse their Horse ] *The light armed alone, without a sure retreat to the armed, or else some place of strength, can doe little in repulsing of horse. I haue shewed before in the <sup>b</sup> exploits of Crassus into Persia, how the lightarmed were beaten in by the Persian horse, and by the shew of wounds, they received, and with their feare, discouraged the armed. The like happened in <sup>c</sup> Antonies retreat out of Persia, the light-armed being faine to shroude themselves from the Persian horse within the Phalange of the armed. Be they neuer so many, without some such assurance the horse will soon overrunne them; hauing this assurance their seruice much afflictheth horsemen both in wounding them, and in killing their horse. Therefore <sup>d</sup> of ancient time it was vsuall to mingle horse, and light armed together. For the enemies horse so charged, cannot be able to resist both. A notable example is in <sup>e</sup> Hirtius: Caesar, saith hee, hauing a iourney in hand, and but a small number of Horse, and legionary Souldiers, was in his way set vpon by the enimie abounding in store of Horse, and of light armed Numidians amongst them. And when the Souldiers of Caesar fell out to charge, the enemies horse galloped away, and the foote stood fast, till the Horse with a full carreare returned to the rescue. This kinde of fight troubled Caesar much; and would haue troubled him more, had hee not recovered hills, that were not farre off, and by that meanes shaken of the molesting enemy. And for repulsing horse there is no better meanes for the armed foote, then with the light armed to line that part of the battaile, where the horse shall be about to giue on.*

6 To beat in the light armed ] *The light armed being nimble and quick, and seeking alwayes advantages by changing of ground, can neuer be forced by the armed foote, (who are charged with heauie furniture, and by reason thereof can make no speed) to seeke succour in the battaile of their armed. Either they must be beaten in by the horse, or by the contrary light armed, as Aelian hath here. The Horse are commonly to encounter with Horse, and the light-armed with light-armed, amongst whom the greater number preuaileth, their skil, and armes being alike. For the fight being a fare of, many will sooner wound, or kill a few, then a few many, saith <sup>f</sup> Xenophon: If the fight bee at hand the better armed, or better minded will driue the other out of the field. The <sup>g</sup> Roman Horse, and the light-armed, were too hard for the Macedonians, and chased them to their Campe. And that happened by reason their armour was fitter to close, and to fight at hand. So our Archers at the battaile of Cressly compelled the Genua crosse-bowes to forsake the field, the english bowe being better in vse, then the Genua crosse-bowes. When they haue made the contrary light armed to quit their place, they are at liberty themselves to serue, where most advantage may be had of their seruice.*

7 To discover suspected places, and lay ambushes ] *Suspected places are such for the most part, as ambushes are laid in. Ambushes are of two kindes, being laid either to endamage the enemies battell in the field, or to hinder, and disapoint his march. The places, such as are removed from fight, and had neede of speciall discovery. As woods, mountaines, Forrests, rockes, bankes of riuers, caues, hills, hollow, and deepe waies, and the like. The most part of which are rough, and intricate, and scarce passable for the heauy armed, and horse. But the light armed, that are not incumbered with weight of armes, are able quickly to aduance, or retire, are fittest to lie close in such places, or to search if the enimie be lodged there. For the first kinde of Ambushes wee read, that both heauy armed, and horse haue bene imploied. The warres of Anniball in Italy afford plenty of examples herein. For the other, which is to beset or discover waies, there are none so fit, as the light armed, whose quicknes, and disposition, giueth them aduantage to assault their enemy with their misseue weapons, though the ground be neuer so vnequall, and meanes to view any place suspected without almost any danger of their owne.*

b Plutarch. in  
Cratlo.

c Plut. in Ant.

d Liu. decad. 4.  
lib. 1. 16. A. B.  
e Hirtius de  
bell. African.

f Xenoph. Cy-  
rop. lib. 3. 39. E.  
g Liu. decad 4.  
lib. 1. 16. B.

8 For speedy and farre attempts] *A beaue armed man is not fit for farre or sudden attempts; he is armed for a firme and stedfast fight, and not for concussions.* Alexander, whensoever he was to use expedition, tooke with him the horse and light-armed, leaving the armed to come after. <sup>a</sup> So did he, when he oppressed Clytus, and Glau- <sup>a</sup> Arrian. lib. 4.  
<sup>b</sup> so when he possessed himselfe of the straights of Cilicia; <sup>c</sup> so in preventing the burning of Tarius; <sup>d</sup> so in seeking to take the straights of the Vxians; <sup>e</sup> Arrian. lib. 3.  
<sup>f</sup> and the gates of Peritia <sup>g</sup> and the rocks of Aorne. The same hath bene the manner of other Generalls, as I haue noted in other places. For when Celerity is requisite, who so fit <sup>h</sup> Arrian. lib. 3.  
to be employed, as they who haue nothing to hinder their speed? The Targetiere had but <sup>i</sup> Arrian. lib. 3.  
a light target, and a spear; the lightarmed but their armes. And what are they? bowes, <sup>k</sup> Arrian. lib. 4.  
and arrowes, darts, and slings, which haue no weight in them. <sup>l</sup> Which was the reason <sup>m</sup> Arrian. lib. 4.  
also, that in victory they were employed in giuing chase to the enemie, that had lost the <sup>n</sup> Polyen. lib. 3.  
field. The armed used to follow in good order of battell, the slaughter, and execution <sup>o</sup> in Iphicrate  
was deliuered to the light armed, and horse. Wherein notwithstanding the counsell of <sup>p</sup> Xenoph. de  
Iphicrates was held good; take heede (said hee, to his light armed) of ambushes, <sup>q</sup> exped. Cyr.  
and spare not to presse hard vpon the reare of those, that flie, till you come to <sup>r</sup> lib. 1. 25. D.  
rivers, or straights, or ditches. For it is dangerous in such places to hinder the <sup>s</sup> lib. 7. 416. A. B.  
enemies flights, least feare turne into desperation.

*The fashion of Horse-battailes: and first of the Rhombe,  
the Wedge, and the Square.*

#### CHAP. XVIII.

Those, that haue written before mee, haue diuersely framed *Horse-battailes*, some of *just squares*, some longer in *flanke*, then in *front*, some like a *Rhombe*, some like a *Wedge*, but none of them haue (if I may speake freely) expressed fully their owne conceits. Therefore to make all things cleere, and better to be understood, I will set downe the severall figures of each severall kinde.

<sup>1</sup> It seemeth the *Thessalians* whose power was great in Horse, were the first, that used the kinde of battaile fashioned in forme of a *Rhombe* (the inuention whereof is attributed to *Iason*) as fittest for all encounters; The *Horsemen* thus ordered being ready to turne their faces euery way with speede, and not easie to be surprised in *flanke*, or in the *Reare*. Because the best men stand in the *flanke*, and the Commanders in the *Angles*, as namely the Captaine of the troupe in the front, and in the right, and left *Angles* those, that are called *Flanke-commanders*, and the *Leutenant in the Reare-angle*.

<sup>2</sup> The *Scythians*, and *Thracians* haue used *Wedges*, and likewise the *Macedonians* by the ordinance of King *Philip*. For this kinde of battaile was held of more exact use, then the *square*, because the Commanders are placed in a circle; and consisting of a narrow front, it maketh readie passage thorough any distance, and an easier wheeling and returning to the first posture, as hauing no such troublesome windings about, as hath the *square*.

<sup>3</sup> The *Persians*, and *Sicilians*, and most *Grecians* made choice of *Squares*, being of opinion they were more easie to frame, and fitter for ioint-mouing of the Horse, and more effectually in use. For they are sooner in order being digested

into files, and ranks, and in this order alone all the Commanders fall vpon, and charge the enemy with one maine force. Those are best *Squares*, that double the number of the length to the number of the depth. As when there are eight in length, and foure in depth, or tenne in length, and siue in depth. These in number are of vnequall sides, but in figure foure *Square*. For the length of a Horse from head to taile compared with his breadth requireth more men in rank, then in file [to make vp the *Square*] Some allow thrice as many in length, as in depth, and thinke by that means a perfect *Square* may be formed: because for the most part, the length of a Horse seemeth thrice as much, as the breadth betwix his shoulders. Therefore they giue nine in front, and three in flanke. For a multitude of Horsemen yeeld not the same advantage behinde, that foote doe, when in the depth of the Battaille they jointly thrust on; in as much as the Horse helpe nothing to the settlednesse of fast resistance, being neither able to thrust those forwards, that are before, nor yet to linke, and knitt with them, and so to make one weight, as it were, of the whole body: and in case they presse vpon the forme, by disordering, and dissembling their owne Horse, they annoy themselves more, then the enemy. Therefore it alwaies falleth out, that when there are as many Horse in length, as in depth, a *Square* of number is made, but the sides of the figure are vnequall, the depth exceeding the length in proportion: but when the figure of the Troupe is *Square*, the number of the sides and front, is vnequall.

## Notes.

**I**n the second Chapter of this booke, the armie was diuided into two kinds, footemen, and Riders. Footemen againe into three, armed, Targetiers, and light armed. Of these three is hitherto treated. Riders follow, who either vsed Horses, or Elephants. Horses either alone, or else in Chariots. Of these *Ælian* treateth severally hereafter. For the arming, and place of Horse in the field, hee hath sufficiently spoken already. The following discourse is: First, of the manner of embattailing horse (wherein he setteth downe the diuersity of vsage in ancient time) Then of Chariots, and lastly of Elephants. \* That a horse is a kinde of beast, that loues man, and is most faithfull vnto him *Plin* testifieth. The vse of him is for carriage, and for seruice in the field. And in the seruice of the field an armie without horse, is in a manner no armie. *Iphicrates* (as I haue said before) comparing an armie to a mans body resembleth the horse to feete. And as the body hath no power of moving, or rather remouing, the feete being lame, or taken away, so is the armie slow, and unfit for expedition, that is destitute of horse; and may be well resembled to those beasts, that creepe vpon their bellies, whose greatest part is with little speede. The horse do great seruice in the field of themselves alone, and are principally employed in matters that require quicknesse in dispatch. Therefore are they fit for discoveries, either of the enemies country, or of his campe, or of his marche, or of other things, whereof the Generall desires to haue notice. And not for discoveries alone, but to spoile, and destroy, whatsoeuer the enemy hath growing, to make prey of his Cattle, burne his houses, kill his people, surpris his places of strength, and to imbarre him from doing the like to vs; to bring and conuay prouision for our Campe, to (but in the enemy, that he goe not out his campe for like causes, to hinder the enemies march by falling on the reare). Briefely all expeditions of celeritie are for the most part deliuered to the horse alone. Especially as long as they are in such places, as giue them liberty to go on, or retire at their pleasures. Yet are they often ioyned with the light armed, as I haue shewed. They often ioine likewise

a *Plin* natural  
histor. lib. 7.  
cap 56.

likewise with the armed. \* And if they may come to charge the enemies battaille in the flanke, or reare, at such time, as our armed charge in front, they endanger all. But for employment alone against the armed foote many examples of former times shew, how weak there force is. \* And how little they preuaile (especially against armed, that are practised in fight, and resolute Souldiers) The examples I haue quoted in the margin make the matter cleare. For further confirmation I will set downe *Xenophons* opinion; which all be it, is were deliuered concerning the Persian horse, that came against the armed foote of the Grecians in their return out of Persia, yet the reason stretcheth to all horse in generall. His words sound thus: \* If any of you faint in minde (as he to the Grecians) because we haue none, the enemy many horse, let him consider, that ten thousand horse-men are no more, then ten thousand men. For no man was euer slaine in battaille by byting, or stroke of a horse: Men they are, that performe; whatsoeuer is done in fight. As for vs (the foote he meaneth) our mounting is much more firme, and stedfast then theirs. They hang vpon their horse, and are in feare not onely of vs, but to be shaken of and throwne to ground. We contrariwise haue stable footing, and shall be able both with great assurednesse to strik; and direct our aime with more certainty. One advantage the horse-men haue, they may more securely runne away. *Hitherto* *Xenophon*. And so much is summarily spoken of the seruice of horse.

**I**n The Thessalians, whose power was great in horse. The Thessalians inhabiting about the mountaine *Pelion* were the first, that fought on horse-backe, and were therefore called Centaures; When they watered their horses in the riuer *Peneus*, the horse-headedes stooping to drinke made the vnskilfull multitude, who saw the bodies of men ioyned to the shoulders of the horse, conceiue, that the vpper part was man, and the neither Oxe. For it should seeme, horse were not so well knowne then, as Oxen, with which they laboured and plowed their land. The Poets therefore fained, that they were monsters compounded of two diuers natures, man and ox, or bull; and that Centaures, the beginner of the race was begotten by *Ixion* vpon a cloude, which was figured like *Luno*. Howbeit *Seruius* giueth a better originall of the name, saying, that certaine seruants of a Thessalian King seeing their masters Neate, raging with the *Brimse* (a fie that biteth cattell) got a horse backe, and pricking them with goades, reduced them to their stables; and that they were after called Centaures, *Para kentein tou saurov*, of pricking the neate. The great *Etymologicon* giueth yet another beginning of the name. For where I haue said that Centaures was begotten by *Ixion* vpon a cloude, which was figured like *Luno*, with whom *Ixion* was in loue: The *Etymologicon* saith, the sonne of *Ixion*, and of the cloude was called Centaures: *Apo tou ton patera autou kentein ten auran*. But \* *Diodorus Siculus* reporting the historie of the Centaures, speaketh not of Centaures, the father of the race but saith notwithstanding, that they were bred of a cloude, and that the Nymphs brought them vp, and that they were the first horsemen, and therefore called *Hippocentaurs* which gaue occasion to the fable; that they had two natures. It is generally agreed, that these Centaures were Thessalians, and that they were the first horsemen, that are mentioned in any history. And as *Xenophon* saith, they were the first, so by reason of their long practise \* they were accounted the best, the most valiant, and the most expert horse-men of all Greece, even to the time of *Philip*, sonne of *Amintas* King of Macedonia, who conquered all Thessaly (saith *Iustin*) not of desire to make himselfe rich of the prey of that Countrey, but to winne to his armie the strength of the Thessalian horsemen. Whose seruice he vied afterward in all his war. Neither did they lesse seruice to his sonne \* *Alexander*, in whose greatest battailes their vertue clearely appeareth, and is especially commended by histories. \* *Pyrrhus* likewise

a *Diod. Sicul.*  
lib. 16. § 12.  
Pol. lib. 3.  
266 A. B.  
b *Hirtius* de  
bell. African.  
c *Xenoph.* de  
exped. Cyr.  
lib. 3. § 108. B.  
d *Plut.* in *Amon.*  
e *Appian* in *Par.*  
164.  
f *Xenoph.* de  
exped. Cyr. lib.  
3. § 104. B. C.

d *Diod. Sicul.*  
lib. 4. § 189.

e *Xenoph.* lib.  
7. § 42.  
f *Plut.* lib. 7.  
§ 43. C.  
g *Diod. Sicul.*  
lib. 17. § 73.  
h *Plut.* in *Alexand.*  
i *Pyrrhus* in *Pyrrhus*

e Plutarch in  
Ag. filio.  
Xenoph. Hist.  
gez. lib. 4.  
518. A.

thus also, principally by their valor, put the Romans to flight. \* Agefilas returning out of Asia towards his Countrey led his army through Thessalie, and being much incumbered in his march by the Thessalian horsemen, that were his enemies, hee charged them and overthrowethem, and pleased himselfe marvellously therein, because with troupes of horse, which himselfe had raised, and disciplined, hee had overthrowne the Thessalians, that were (saith Xenophon) so highly renowned for horsemanship.

2 Fashioned and forme of a Rhombe ] There are three kindes of horse battailes mentioned by Elian, the Rhombe, the Wedge, and the Square. And the square is either a iust square, or longer in flanke then in front, or in front then in flanke. The Rhombe was the inuention of the Thessalians, and in that forme they usually fought. But where he maketh lason to be the inuenter of it, he afterward expoundeth his owne meaning, attributing the inuention to Leon the Thessalian (from whom also it was termed Ile.) but the chiefe practise to lason. Euclide defineth a Rhombe in this sort:

\* A Rhombe is a square figure, that hath the sides equall, but the angles not right. That is, the foure sides of the square are of one, and the same length, but the points, which make the angles, are two of them stretched out in greater length, and become more sharpe; two of them brought narrower together, and made more blunt, then the right angles of a Tetragonall square. See the figure. It is the same figure in a battaile, that at this day we call the Diamond battaile, which is sometimes practised amongst the foote for show, and exercise sake, but amongst the horse I haue not seene it practised. And as the square goeth to charge with all the souldiers, that stand in one of the sides, that is with the front, (for the front is but a side of the square) so the Rhombe chargeth with one of the points, which is the front of the Rhombe. Whether of them is of most use in the field, I am not to determine. For the square standeth the practise of our daies, besides the vse of the Persians, Scitians, and most Grecians, as Elian saith. For the Rhombe the Thessalians alone (which notwithstanding were acknowledged the best horsemen of Greece) vnlesse we allow the Wedge for a parcel of the Rhombe, (a Rhombe being but a double Wedge, as making two wedges, when it is diuided in two) and then haue wee for the Rhombe not onely the Scythians, and Thracians (both nations very good horsemen) but King Philip Amintas sonne, and Alexander the great, and his successors. Either of both formes haue their reasons. For the squares they, that vse them, held opinion (as Elian saith) that they were easier to frame, and fitter for ioint mouing of horse, and sooner in order of file, and ranke, and that the Commanders iointly charged the enemy, which in no other forme could be done. For the easinesse to frame I see no great difference, onely custome, and vse, must in euery forme, yea in the squares themselves make the horseman ready to know, and take, and keepe his place. The same may be said for the ioint mouing of the horse. Now to file and ranke is common to the square with some Rhombes, and as soone done in the one, as in the other, the number of the troupe being once knowne, and euery horseman hauing his place assigned, and the forme resolu'd upon, into the which it must be cast. For where there are 4 kindes of Rhombes, one, that filth, and ranketh; another, that filth, but ranketh not; the third, that ranketh, but filth not; the last that neither filth, nor ranketh (as Elian teacheth in the next Chapter) The first will finde no more difficultie, of filing, and ranking, then the square, the two next albeit the one ranke not, the other file not, yet the want of filing, or ranking hindereth no more the readinesse of framing them, then the vse of filing, and ranking helpeth the other. The fourth is rather curious then profitable, as I take, neither doe I finde example of it. And it may be truly affirmed of it, that the square is much easier to be fashioned. We shall haue occasion to speake of the last three in due place. Touching the ioint falling on of the Commanders, I confesse the advantage is great. For when the best men (such as the Commanders ought

to be) altogether fall upon the enemy, they are very like to put hard to them. And as it is a great part of skill to bring many hands to fight, so it is no lesse, to bring the best hands to fight. Many hands make light worke, the best hands sure worke. Now for the Rhombe Elian allegeth these reasons. First, that it is fittest for all encounters, because the horsemen are ready to turne their faces euery way with speed. Then; that they cannot be surpris'd in flanke, or reare, hauing the best men in their flanks, and the Commanders in euery point of the Rhombe. And cannot the square turne faces euery way? They can, but not with the same advantage. For the Rhombe, which way sooner faces are turned, remaineth in the first forme. And whether it be to the right, or left flanke, or to the reare, it keepeth still 4 euery side, and the men of most service in the sides. Besides that one point alwaies affronteth the enemy. Not unlike a Calthrop, which howsoever you cast it to the ground, hath one point bearing right up to wound the horses feet: But the square in turning faces to either flanke altereth the forme of the front: In a broad square, the front at the first was longer than the sides; faces being turned to either flanke the sides become longer, than the front; contrariwise in the Herie battaile. Besides in such turning of faces the square loseth the advantage of embattailing, the Commanders, that stood in the front, standing now in one of the flanks, and being not able to charge the enemy iointly, (the greatest advantage of that forme) and so the front being without Commanders, is subiect, and in danger of surpris, where the Rhombe, which way sooner faces turne, hath as many Commanders in the front, as at first. But let vs take the horse square in full strength with ad Commanders in front; whether shall that forme be better, than the Rhombe? I dare not affirme it. For where there are two kindes of fight; One with maine force, the other with sleight, and Art; in the first I will preferre the square, in the last the Rhombe. The square for slaughter and violent overthrowing; the Rhombe for piercing and artificial breaking the enemies battaile, which last amongst great Commanders hath alwaies bene accounted the best kinde of winning. In the square all the Commanders fall iointly upon the enemy, and because they are supposed to be the cheife of the Army, in all likelihood they will overthrow the formost, and slay many. Yet by reason of the length of their front, they sicke man to man, and can make no ferre entrance, and the victorie hangeth doubtful, till they haue slaine the most of them, that resist, and so make the rest to flie. The Rhombe contrary wise, being narrow, and pointed in the front, first forceth a passage with the point, which maketh way to the rest that follow, and then without great labour piercing further, and further, breaketh the aduers battaile, & disperseth, and putteth them to flight, and after doth execution at pleasure. Neither can I make a fitter resemblance; then by comparing the 2 figures; one to an axe, the other to a wedge, both instruments used for diuiding solid masses of wood. For the axe, albeit sharper, than the wedge, yet hauing the edge drawn out in length, can not by any strength be driven furre into the wood, but by doubling many strokes, and by much labour cometh at last to diuide it. The wedge contrary wise, though not so sharpe, being once enured, insinuateth it selfe more by litle, and litle with the narrownes of the point, and maintayning the hold it first got, at last forceth it asunder, though it be neuer so tough. So is it in the square, and Rhombe: whereof the square beginneth, and endeth with violence; the other with first cunning, and mildenes, as it were: being once entred reiteth a peece, and disparteth all that standeth in the way. The manner of our times alloweth not of Rhombes; Experience of former times highly prized them. I will insit upon the Thessalians alone, who are accounted the inuenter of the Rhombe, & fought alwaies Rhombe wise. Polybius had seene their service, and bene General of the Horse in his owne countrey, and therefore able to iudge. He giueth this censure of them; \* that in troupes, and being imbarrai-  
led,

led, they could not be resisted: to fight man to man in single combat, they had neither will, nor courage. *What then should be the reason, they should be so powerfull in troups?* No other, then the forme of their imbatailing, which forme was the Rhombe here mentioned by Elian. In this forme they commonly beat the Græcian, and Persian squares, and gat the reputation of the best horsemen of Europe.

3 The Scythians and Thracians vsed the wedge ] The Rhombe is of 4 sides, the wedge but of three: and halfe a Rhombe maketh a wedge, as will be shewed in the next Chapter. The wedge was used by the Scythians, and Thracians, and whether King Philip of Macedonia borrowed it of them, I am uncertaine. But I rather incline to thinke, that his Theban Master taught him as well the wedge, as other formes of battailes. The cause of my conjecture is, for that I finde that his fellow scholar Epaminondas beat the Lacedemonian horse at Mantinea in that forme. Xenophon recounteth the storie to this effect: The enemy (they were the Lacedemonians) ordered their horse like a Phalange of armed in depth: without mingling foote with them: But Epaminondas made a strong wedge of horse also (for before he tells the Theban armed were cast into a wedge) and ioyned some foote with them, concealing after he had cut in peeces the horse, he should not misse of ouercomming the other forces of the enemy. And so going to charge, he was not deceived of his hope. Thus Xenophon. Of ioyning horse and light armed together, I have spoken before: And that they were light armed, that Epaminondas ioyned to his horse, Diodorus Siculus sheweth. By Xenophon then it is plain, that not onely the Scythians, and Thracians, but the Græcians also, when they thought it convenient, vsed the horse-wedge, and that Epaminondas ordered both foote, and horse in a wedge. And considering King Philip was brought up in Epaminondas his Fathers house, and made partaker of the learning wherewith Epaminondas was instructed; it is like in erecting a new military discipline amongst the Macedonians, as he tooke many other things from the Græcians, so he borrowed this forme, having first seene the notable effect thereof at Mantinea.

Now Elian bringeth reasons, why the wedge was holden better than the square. Let me with leave adde a word or two why I take it to be better than the Rhombe. And first it cannot be denied, that the wedge having the same manner of disposition that the Rhombe hath, that is a front ending in a point, where the Captaine standeth; two points of the two flanks, where the flank-commander stands, the Lieutenant in the reare, and the best men in the flanks, but it must be as powerfull to open the enemies battaile, as the Rhombe is. Then it hath this advantage of the Rhombe that it bringeth more hands to fight. For let the Rhombe and wedge be framed of an equal number, the wedge in figure resembling the forepart of the Rhombe must have the horse, that should be ranged in the reare of the Rhombe, orderly couched within the 3 sides thereof: where by both the number of the horse in the sides is increased, and the bulke of the body betwixt flank and flank enlarged. And seeing both the Rhombe and the wedge goe to the charge with the point of their front, the wedge both hath the property to pierce, and enter the enemies battaile by art and sleight, as well as the Rhombe, and do it with more strength, because of the great number of hands in the sides, which all come to fight. Ioyned, that the hinder part of the Rhombe serveth onely to avoide surprizes, and worketh nothing in charging. For after the two flank points are entered, the rest of the Rhombe growing narrower, and narrower toward the Reare, falleth further off from the enemy, and is content onely to follow the way, that was made to hand by the front, and flanks: without being able to strike a stroke; especially if it preserve the order it ought to keepe: whereas all parts of the wedge are effectfull, the point to enter, the sides euen to the flank corners, where

b Diodor. Sic.  
lib. 16. §10.  
c Xenoph. hist.  
Græc. lib. 7.  
§46. B.

d Diod. Sicul.  
lib. 15. pag. 502.

where the Reare endeth, to dispart and disouer; and finally to disorder the enemy, whereby the victorie ensueth. And if we may rely upon authority, the authority of King Philip will say much for the wedge. For unlesse he had held it better than the Rhombe, hee would not have chosen, nor accustomed his Macedonians to it, nor Alexander after retained it, if he had not bene of the same opinion. Neither did the cunct accieve them: for almost in all battaile, their horse thus disposed caried away the victorie. But, as I before noted, neither Rhombe, nor wedge have found grace in the eyes of the great Generalls of our daies, nor can we tell what to insist upon, till experience hath taught, how well these formes will agree with the weapons, and service of our moderne warres.

4 The Persians made choice of squares ] The square is the third, and last forme of horse-battaile that Elian mentioneth; whereof there are three kinds; one with a larger front, then flanke; an other with a larger flanke then front; the third, with front, and flanke equal. All these three were used amongst the Persians, and Græcians. For two of the first, Xenophon may witnes. When Ageilaus, after Tissaphernes (the King of Persia's Lieutenant in part of the lesser Asia) had broken truce with him, made an incursion into Phrigia, h Xenophon telleth, that the rest of his journey was without impediment, till he came not farre from Dascylium. There when his horsemen galloped to a hill to discover the country, by chance the horsemen of Pharnabazus (an other of the King of Persians Lieutenants) being about the same number that the Græcians were, and sent by Pharnabazus vnder the command of Rathynes, and Bancæus his bastard brother, galloped vp the same hill, and discovering one the other no further off, than two parts of a furlong, at the first they stood still; the Græcians ordered Phalange-wise 4 in depth, the Barbarians making their front 12 in length, the depth many more. Afterward the Barbarians began first to charge. when they came to hands, all the Græcians that ioyned, broke their flanks. The Persians having Cornel darts killed some 12 horsemen, and 2 horses. Hereupon the Græcians fled. But when Ageilaus came with the Armie to the rescue, the Barbarians againe forsooke the field. The Persians then vsed a square longer in flanke, then front: The Græcian a square longer in front, then flanke. But which of the three squares is most to be esteemed Elian sheweth in the words following, saying those squares are best, that

5 Double the number of the length, to the number of the depth ] What the length, and depth in a battaile are, we have seene before. Yet to vnderstand Elian the better, let vs repeat, that the length of a battaile is the extension of the front; the depth the extension of the flanke. To double then the number of the length to the number of the depth, is to place twice so many men in front, as in flanke. As for the purpose, 6 in front, 3 in flanke; or 8 in front, 4 in flanke; or 10 in front, 5 in flanke. And that this was the manner of the Lacedemonians appeareth by the Oulamos, or horse-troupe instituted by Lycurgus, which was figured Tetragonally with 4 equal sides, and contained in it 50 horse. Now that it could not be a square of number, that is, to haue as many horse in flanke, as in front may hereby be shewed, because no square number will make 50. The nearest is 7 times 7, which amounts to 49. But proportioning the number of the length double to the number of the depth, that is 10 in front, and 5 in flanke, euen 50 will arise. So that the horse troupe of the Lacedemonians had the number of the length double to the number of the depth, and made a square in the equality of measure of the sides, not in number, which is the Tetragonal figure, whereof Plutarch speaketh. And where Xenophon (as I have alledged before) reporteth that the horsemen of Ageilaus were but 4 in depth, it hindereth not this truth. For, as I noted before, the ordinary army of the Lacedemonians foote was 8 in depth. Tet did Paulianus the Lacedemonian King

h Xenoph. Hist.  
Græc. lib. 3.  
498. D.

i Plutarch. in  
Lycurga.

King cast his men into a deepe Phalange against Thraſibulus. Other examples I have alledged in the ſame place touching the ſame matter. Beſides this appeareth to be but a tumultuous fight either of the parties comming ſuddenly in the fight of the other, and going preſently to charge, before they could have time to alter the order they then were in. And ſo ſay the horſe troupe of the Lacedemonians ought to have bene but 4 in depth, it muſt thereof neceſſarily follow that they were 12 in length, which yet will com: ſhort of 50: 4 times 12 makes but 48. Indeed <sup>h</sup> Leo holdeth opinion, that in a horſe battaile, the depth ought to be no more than 4. I will ſet downe his words as neare, as conveniently I can enliſh them. The depth, ſaith he, or thicknes, as it was of ancient time limited, is ſufficient, if it be of 4 horſe in euery troupe; becauſe in horſe a greater depth will be idle, and to no purpoſe. For they cannot, as foote doe with their thicknes, thruſt one another forward from behind; and ſo the formeſt, will they, or will they, are forced to goe againſt the enemy. And this is done amongſt foote. But the horſe can not thruſt forward thoſe, that are before them, nor the file-leaders that ſtand in front, be ſeconded in that kinde by the reſt, that ſtand in depth after the fourth man. For if they be *Lancers*, the fiſt ranke cannot reach with their launces to the front. If *Archers*, they ſhall be faine to ſhoot aloft for feare of hurting their companions before; and ſo their arrowes ſerue for no uſe, after fight is ioyned. Therefore is the number of 4 ſufficient in depth, as I have ſaid. *This was the opinion of Leo. To which I cannot abſolutely aſſent; unleſſe he had given 8 for the front of his troupe, and ſo made it of 4 equall ſides in figure, not in number, as Elian requirith to be done in the beſt ſquares. For the reaſon of launces not reaching to the front in the fiſt ranke, reacheth not home to the reaſon of warre. Elian before hath declared, that the pikes of the ſeventh ranke reach not to the front of the Phalange. Yet no man will thereof inferre, that the Phalange ought to be but 6 deepe. Yea but the foote that come after, helpe the formeſt, ſeconding them, and thruſing them on with the weight of their bodies, which the horſe can not doe. This muſt be granted to be an advantage, that foote have about horſe in depth. Yet are there other reaſons alſo of giuing depth to a Phalange: In the order whereof two conſiderations concur; one of offence, the other of defence. The reaching of pikes or horſemens ſtaues ouer the front is good for offence, that is to annoy the enemy in the ſtocke: likewise the thruſing on of thoſe that come behind, ſerueth with the violence to make them giue ground. A reaſonable depth is for defence, in as much as it defendeth a Phalange againſt the indeuour of the enemy to breake it a ſunder. And as it is a fault to make it too deepe, ſo is it likewise a fault to make it too ſhallow. Too much depth narroweth the front, and giueth eaſie meanes to the enemy to incompaſſe, and over-front it. Too much ſhallowneſſe on the contrary ſide maketh it weake, and ready to be broken, and diſſeuered by the enemy, and giueth a paſſage thorough, and meanes not onely to incompaſſe the front, but at the ſame inſtant alſo to aſſault it behind, and ſo utterly to defeat it. So that the reaſons of Leo reach not home, as I ſaid, there being other cauſes of thickning a horſe troupe beſides reaching of launces to the front, and ioint thruſing on of the horſe comming behinde. And where Leo ſpeaketh but of 4 horſe in depth of a troupe, Polybius ſaith plainly that being ordered for fight, they had for the moſt part 8 in depth; Polybius a man which liued in the times, whereof Leo ſpeaketh, and had bene Generall of the horſe of the Achæans. Beſides Leo ſeemeth not a little to differ from himſelfe. For in his ſeventh Chapter, he writeth after this manner: If there be many horſe (that is about twelue thouſand) let the depth be of 10. If but few, let it be no more than 5. In ſquares therefore I hold Elians proportion beſt, to double the number of the front, to the number of the flanke; and as the number of the troupe ariſeth (for horſe troupes are not alwaies of one number) to enlarge the length of the*

k Leo cap. 11.  
3.40.

l Leo cap. 14.  
5.108. 109.

m Leo cap. 7.  
581. 5 cap. 14.  
570.

the front, and the depth of the flanke proportionably one to an other.

6 When there are as many horse in length as in depth ] I noted before in the ninth Chapter, that there were two squares of equall sides, the one of number, the other of figure; which two squares differ in this, that the one maketh vnequall sides in the shape of the battaile, the other equall. The first at this day, we call a square of men, the other a square of ground. When the number of the sides is equall in length, and depth, it giveth but halfe so much ground in front, as in flanke. Each souldier, if it be a foote battaile, occupying a foote, and a halfe of ground in front, when he goeth to charge, where in flanke he must haue 3 foote. And in a horse troupe 3 foote in front, and double, or (as some say) treble as much in flanke. And so are the sides vnequall. The euen length of flanke and front giveth a like ground to both, and maketh the sides of the figure equall, but the number of the front double to the number of the flanke, whether it be in horse or foote. In foote, because the souldiers in ranke haue but halfe so much distance, as they haue in file; in ranke a foote and a halfe, in file three foote: In horse, because the length of the horse is much more, than his breadth, and that length is fully stretched out in flanke, the breadth onely in front.

Why Rhombes were first brought into vse, and the diuers formes of them.

#### CHAP. XIX.

THE forme of the Rhombe seemeth to haue beene taken vp for the necessarie vse thereof. For the Capitaine possessing the first place, the next following Horsemen are not to ranke with him, but to come a litle after on both sides; so that the heads of their Horses may reach to his horse shoulders, & on the right, & left hand, and behind, they ought to keepe good distances that too much thronging and clustering together, breed not disorder, whilst some horses being by nature fullen fall a flinging oftentimes, and foule with other; and considering the beast is somewhat long of body, that in turning about he wound not the horsemen, that are in fight, whilst with his heeles heauieth at the Horses next vnto him.

They that fashion Horse into Rhombes, so fashion them, that some Rhombes file, and ranke; some neither file, nor ranke; other some file, but ranke not; other ranke, but file not: euery particular whereof standeth thus.

They that would haue a Rhombe both file and ranke make the greatest ranke being the middlemost of an vneuen number, as of 11, or 13, or 15. To which they ioine other rankes before, and behind, euery one conteyning two lesse than the former; as if the greatest ranke consist of 15, the next rankes on either side are to haue but 13, the next on either side of these 11: and so euery one two lesse, till at last you come to 1. And the whole Troupe is to consist of 113 horse.

3 The halfe Rhombe is called a wedge being fashioned three square; so that the forme thereof appeareth in the Rhombe.

Other haue formed the Rhombe so, that the 4 Horsemen embattailed in that forme, neither file, nor ranke, conceiuing that turnings and other motions will be more easily performed in this figure, nothing hindering before, behind, or in flanke. And first they place the Leader; then one at his right, and another at his left hand, so distant, that their Horses heads reach vp to his Horses shoulders, as



is said before. And the first row they make of an vneuen number (as 11). The Leader of the Troope standing in the middleit, and 5 other being laid to him backwardly on either side; so that this Ranke containeth two sides of the Rhombe. Then the reare-Commander is placed directly behind the Leader, and to him are other ioyned forwardly on either side, and the number of euery following ranke after the first, is to be two lesse than the former, and therefore 4 must be added on either side to the reare-Commander, and the number of the second ranke be 9. This ranke maketh two sides Parallel to the two former sides of the Rhombe. The third must be 7, and so forward to one. The whole Troope hath in it 36 Horse. Polybius expresseth the forme by the Greeke letter  $\Delta$ . and maketh it to consist of 64 men.

Other Rhombes there are which 6 file, but ranke not, and are fashioned thus: They make a file of any number, the Capitaine of the Troope being File-leader, and the Reare-Commander the last of the file. To both the flanks of this file, they lay two other files, either of them one lesse in number, than the first. These they begin to place, euen with the middleit of the distances of the first file on both sides, as if there were 10 in the first file, the next files on either side should haue 9 a peece, and the next after them 8 a peece, and still one lesse in all the rest after-coming files, and so it will fall out, that the Horsemen shall file, but not ranke. This forme is profitable for turning of faces, when need is, from one point of the Rhombe to another. Turning to the right hand is called turning to the staffe. Turning to the left hand is called turning to the Raines. But if a Troope be 2 to ranke, and not to file, it must be ordered thus: The middle and greatest ranke is to be made of an vneuen number, and the rest of the ranks on both sides, laid euen with the distances of this ranke, as was done in the filing troope. So shall you haue a Troope that ranketh, but fileth not.

## Notes.

THE former Chapter had a generall diuision of Horse battailes into Rhombes, wedges, and squares; this comprehendeth the sundry figures of Rhombes, and the manner of framing them. Rhombes therefore are of 4 kinds, some filing, and ranking; some filing, not ranking; some ranking, not filing; some neither filing, nor ranking.

1 The heads of the horses reach to the heades of his shoulders] *Ælian* saith, that in a Rhombe the Capitaine standeth first, and the heads of the next horse reach to his horse shoulders. This rule, if it be taken generally, and meant of all Rhombes, will deceiue vs; if for two kinde of Rhombes alone, there is nothing more true. The Rhombe neither filing, nor ranking; and the Rhombe filing, not ranking, haue the followers horses heads advanced to the shoulders of them, that stand before. But the Rhombe filing and ranking, and the other ranking not filing, come wholly behind the horse of the Capitaine, as the figure shewes, and will appeare in the verball description of the Rhombe.

2 A Rhombe both to file and ranke] To make a Rhombe both file and ranke, choicemust first be had of an vneuen number for the ranke the middleit of the Troope, where the manner is to begin the Rhombe; which number must neither be too great, least the Troope grow also too great, nor too little, lest there be in it no strength. *Ælian* giues a 11, 13, or 15 for that ranke, and willett vs to begin the frame by placing first the middle ranke, to which the other ranks are to be ioyned on both sides, the middle men

against

against the middle man of the first ranke in a right lin: of file, and the rest in like sort, euery Ranke still decreasing 2 men, till at last in the front, and reare-angle you come to one. The figure of this kinde of Rhombe I haue placed in the precedent Chapter; wherein the middle ranke is of 11, and the whole troupe of 61, and the horse heads of those that follow reach not to the former horses shoulders.

3 The halfe Rhombe is called a wedge] I haue spoken of wedges before, but nothing of the framing of them. *Ælian* here sheweth how they are framed, when he saith, that the forme of them appeareth in the Rhombe, and that the halfe Rhombe is a wedge. For as in a Rhombe filing, and ranking, you begin with placing the middle ranke first, and so proceed adding on both sides ranke to ranke, till you come to one man in the front: So must you proceede in a wedge, sauing that to the first, and greatest ranke you ioine the rest onely on the one side, abating still in euery ranke 2 men, till you come to the point of the front, where the Capitaine standeth alone. And this was the ordinarie horse troupe amongst the Macedonians, and is described in the next Chapter.

4 That the horsemen neither file nor ranke] The second kinde of Rhombe specified here by *Ælian* is directly opposite to the first. The first both filed, and ranked, this neither fileth, nor ranketh; and is that kinde, which I noted in the last Chapter, to haue more curiositie, than use. For the rest, what is more easie to frame, than they? In which either files, or ranks are laid together; or files alone, or ranks alone. And out of that ioyning both in the inward parts of the Rhombe, and the outward (that is the flanks) arise, and are without difficulty figured. In this you must first begin with the out sides, and make two front lines, or sides of the Rhombe; and after adde as many to the Reare. And then when the 4 sides are framed, and haue their place, patch up by peece-meale the rest of the body within. Wherein if there be not very large distances left betwixt horse, and horse, especially euery one being laid head to shoulder to another, it is not possible to convey so many horses within the foure sides, as will make up the full Rhombe. And yet make it up as you will, the trouble is more, than in the rest of the Rhombes. And for the use, I see not how it can be greater, than in the rest, what sooner is alledged for turnings, and other motions. And the more I thinke upon it, the more I am induced to thinke, that it was the invention of some Tacticke master (of whom were great plenty amongst the Græcians) who seeing that some Rhombes filed, and ranked not; other ranked, but filed not; other both ranked, and filed, and that the two first were opposite the one against the other, would needs bring in a fourth, neither filing, nor ranking, to make an opposition likewise against the third. But because this kinde also is specified by *Ælian*, let vs see how it is to be framed. *Ælian* for examples sake would haue the Troope to consist of 36 horse: To put the 36 horse in a forme, that shall neither file nor ranke, we are thus to worke. First, we must begin with the two front sides of the Rhombe, and make them of 11 horse, placing them thus: The Leader and Capitaine in the point; next him backwardly on each side a horseman, his horse head reaching to the shoulders of the Capitaines horse; then on the outward side of each of these a Horseman, and their horses heads must likewise reach to the shoulders of the next horses before. So must you goe on, till you haue in like manner bestowed 2 a peece more on each side, still opening the two sides of the Rhombe proportionally. Thus done you haue Rhombe of 9 horse, placing them after this will be in this forme. Then are we to fashion the two Reare sides of the two sides of the Rhombe which manner: The Lieutenant in the Reare angle, directly opposite to, & yet looking toward the Capitaine; on either side of him forward toward the front 2 Horsemen, their horses shoulders lying euen with the head of the Lieutenants horse. And after them the other 6; 3 on one side, and 3 on the other in the same proportion. And so haue we the other two sides of the Rhombe in this forme, which being

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## The Tacticks

ioyned to the former make the 4 sides of the Rhombe; In the framing whereof 20 of the 36 horse are bestowed. There remaine 16, which are thus to be ordered: Within the Rhombe we must at reasonable distance place a horseman behind the Captaine in aright line, and in the manner as before lay 3 to him on each side. The number will amount to 7, and this is the figure.

Then another horseman is to be set at the same distance directly before the Lieutenant, and on each side of him two other toward the front. And these 12 horse ioyned together, will fashion out a lesser Rhombe, comprehended within the sides of the first. So are 32 horse disposed of. The 4 that are left are thus to be ordered. In a right line againe after the Captaine, and at the former distance is another horseman to be set: Then 2, one of the one side, & the other of the other side of him, their horses heads reaching to his horses shoulders thus. The horseman left must supply the voided place, standing directly before him, that stood next before the Lieute-  
nant thus. And this is the true description of the Troope neither filing, nor ranking. I haue bene the longer in describing it, because the figure grauen is not fully to my minde, no horse head reaching to the shoulders of the horse, that standeth before him.

5 Polybius maketh it to consist of 64 men] Elian tooke the number of 36 horse to frame this Rhombe, Polybius requireth 64. The number is not materiall, so the forme be obserued. If you make it of 64, you are to take 15 horse for the 2 front sides, and 13 for the 2 reare sides, and so in euery ranke within to diminish 2, as you did in the former.

6 Which file, but ranke not] The third kinde of Rhombe fileth, but ranketh not. It is easie to frame. Take what number of horse you please, and make a file; then lay to the distances betwixt horse, and horse of that file on each flanke two other files, each file conseruing one lesse in number, than the first. And the heads of the files are to be laid right against the space which is betwixt the Captaine, and his follower, and the rest of the horses against the other spaces successiually. In all the paires of files, that follow, and are laid to the flanks, you must still diminish a horse a peece, till you come to the points, which haue but one either of them. And of this abatement of one in euery file, both front, and reare, and flanks grow into points, and make a Rhombe: As of the euen number in euery file, a square battaile would arise. See the figure. This was the forme the Theffalians sought in, as appeareth by Elian.

7 Turning to the right hand] The turnings of horsemen and footmen to the right, and left hand, are not termed by the same names. And the difference commeth of the diuersitie of weapons caried on the right, or left side. The horseman in his right hand held his staffe, in the left the reins of his bridle. The armed-foote in his right hand his pike, on the left shoulder his Target. Hence was it, that when the horseman was commanded to turne to the right hand, they bid him turne to his staffe; the footman to his pike. When to the left hand, they bid the horseman turne to the Reins, the footman to the Target.

8 To ranke, and not to file] This is the last kinde of Rhombe, and it ranketh, but fileth not. It is made by a contrary way to the former. The filing Rhombe began at the front point, & reare-point, & proceeded to the flanks. This beginneth at the flanke points, & proceeded to the front and reare. First therefore a ranke is to be laid of what number you list. Elian would haue it of an euen number; but it will fall out as well in an euen number, as the figure sheweth. To the distances of this ranke you must lay 2 ranks more, one on either side, whose number must be one lesse a peece, than the former ranke. Thus continue laying ranks still toward the front, and reare, and in euery paire of ranks diminish one a peece, till you come to the points, either of which haue but one, namely the Captaine, & the Lieutenant, and the Rhombe will ranke, and not file.

CHAP. XX.

after cap. 46.

a Polybius, 4.  
217. 21.

*The place of Horsemen in the field, the number of an usuall horse troupe, the degrees, and names of the officers of the Horse in general.*

CHAP. XX.

**T**H<sup>e</sup> Troopes of Horse, as the light-armed, are placed sometime before the *Phalange*, sometime on the right, or left hand in *flanke* of the *Phalange*, sometime behind the light-armed in the *Rear*. For our purpose, let them be placed in the *Rear*, and <sup>1</sup> let the first Troope be of 64 men, and the first ranke thereof 15 Horse. The next 13; The next 11; and in all the rest abate 2, till you come to the last, which is one.

<sup>2</sup> He shall carry the *Cornet*, that standeth in the second ranke next the *Ranke-Commander* on the left hand. All the Troopes shall be 64 in number. The horsemen in all 4096. <sup>3</sup> Two Troopes are called an *Epilarchy* of 128 horse. Two *Epilarchies* <sup>4</sup> a *Tarentinarchy* of 256 horse. Two *Tarentinarchies* <sup>5</sup> an *Hipparchy* of 512. Two *Hipparchies* <sup>6</sup> an *Ephipparchy* of 1024 horse. Two *Ephipparchies* <sup>7</sup> a *Telos* of 2048 horse. Two *Telos* make <sup>8</sup> an *Epitagma* of 4096 horse.

Notes.

**H**liberto of Squares and Rhombes, usuall horse battailes amongst the Græcians. Now followeth the horse battaile of the Macedonians, of which <sup>1</sup> Ælian hath thus afterward: This forme of horse battaile is called a *wedge* by *Tacticks*, and it was invented by Philip King of Macedonia, who placed his best men before, that by them the weaker might be held in, and inabled to the charge. As in a *spear*, or sword, the point whereof, by reason of sharpnes quickly piercing maketh way for, and letteth in the middle blunt yron. I haue spoken somewhat of the wedge in the two last Chapters. Ælian in this Chapter sheweth the number, and manner of framing it, and how many troupes ought to attend the *Phalange*, and vnder what officers, and degrees.

1 Let the first troupe be of 64 men] The number of the wedge ought to be 64 horse. You make it beginning (as the Rhombe that ranked, but filed not) with a ranke of 15 horse. Then must you proceed toward the front, with an other ranke of 13, the middle man siling with the middle man of the first ranke, and the rest with the rest. And so you are to continue abating still two in euery following ranke, till at last you come to one, who is the *Commander* of the Troupe, and standeth in the point of the front.

2 He shall carry the *Cornet*] The place of the *Cornet* is not right set downe in the figure. He there standeth on the right hand of the middle man of the second ranke, whereas he should stand on the left. And you must not account the second ranke to be the ranke next to the *Commander* in the front; but as Ælian doth, that was secondly placed after the first consisting of 15, which was in the *Rear*. So that the *Cornet* is to stand in the next ranke to the *Rear*.

But here is nothing said concerning the distances, that ought to be betwixt horse, and horse. Of the distances betweene foote, and foote he hath spoken in the 11 Chap: But of the distances betwixt horse, I finde nothing, but generall words. That which wanteth in Ælian, I will supply out of other Authors. We must vnderstand then, that two kinde of distances were obserued amongst horsemen; one for marching, an other for fight.

In marching there ought to be 6 fote betwixt horse and horse. *Ælian* hath before given this distance to the fote. And that horse held it likewise appeareth by Polybius. Who reprehending Calisthenes for carelesnesse in describing the battaile betwixt Alexander and Darius at Issos, specially taxeth this: That he placed thirty thousand horse, and thirty thousand mercenaries, in foureteene furlongs of length. whereas the place was not capable of halfe the horse. <sup>n</sup> His words haue this sense; The order of horse, when they are prepared for fight, is for the most part 8 in depth. And there is a distance to be left in front betwixt euery troupe, to giue liberty to wheele and double-wheele. So that one furlong will containe 800 horse; and 10 furlongs 8000; 4 furlongs 3200: And eleuen thousand, and two hundred Horse will fill the space of 14 furlongs in length. The words seeme at first somewhat obscure, being well weighed they will be cleare enough. Polybius saith, that these 800 horse were ordered 8 in depth, and that they took up a furlong of ground in length. There must be therefore of them a hundred files. For a hundred files of 8 horse a peece, will arise to 800 horse. Compare then these 100 files, (the length of the battaile) to the length of a furlong. And seeing a furlong containeth 400 Cubits, or six hundred fote, euery file shall haue 4 cubits, or 6 fote space betwixt them. And so the distance betwixt file and file in a march will be 4 Cubits, or 6 fote. The other distance of three fote appeareth in <sup>o</sup> Leo, whose words stand thus: Put the case, that the battaile is of 600 horse in length, and 500 in depth, seeing that euery horse in length of the battaile possesseth three fote in breadth, the number of fote will amount to 1800; And seeing againe that euery horse in depth possesseth 8 fote, there will arise hereof 4000 fote; so that in the foure-sided figure, out of the length of 1800, and the depth of 4000 fote arise 720 Myriades of square fete. And the Perimeter alone of the outward foure sides containeth 11600 fete. And because 6 fete make a fathome, and a 100 fathoms make a furlong, and 7 furlongs, and a halfe, make a mile, the whole Perimeter of 11600 fete will come to two mile, and a halfe, and neare a 10<sup>th</sup> part. In this distance therefore according to the closest order, or shutting, the thirty thousand horse are contained. But if they stand not so close, you must alter your account according to the thinnesse, and out of the greatnesse of place coniecture of the multitude of the people. So Leo. Which place albeit it seeme to require a large interpretation, because many things worth noting offer themselves in it; yet for this time I will onely insist upon that, which I first propounded, that is the distance of three fote betwixt horse, and horse, when they goe to charge (for that is the meaning of Leo, when he speaketh of the closest order) which distance is expressly here set downe. And the matter will yet seeme more cleare, if we adde the words of Leo in the Paragraph next, but one, to this, which are these: The oldest Tacticks in ordering of fote Battailes giue euery man at the first distance foure Cubits; when the battaile is closed two Cubits; when ferred and shut one Cubit. Out of which proportion a Scout may exactly discover by the quantitie of the place the number, not onely of horse, but of fote also. These oldest Tacticks that Leo mentioneth agree with *Ælian*, as wee haue seene. But where the fote haue three distances, the horse are to haue but two. The open order of six fote they ought to haue, and likewise that of three fote; nearer they cannot come together, because of the breadth of their horse, and because they are to haue room sufficient for the wielding of their weapons.

All the Troupes are to be in number 64. A Troupe consists of 64 men, and so the Phalange belong 64 Troupes, as the Phalange containeth 64 Ensignes, or Sym-

n Polyb. lib. 1.  
663. A.

o Leo cap. 17.  
5. 89.

tagmas of armed fote. To which Ensignes the 64 Troupes of horse are proportioned. Their place is according to *Ælian* after the light-armed; not one troupe after, or behind an other, but one beside an other, in one front; and that front in a right line, which stretcheth out, as long as the Phalange of armed it selfe. Now the files of the armed being 1024 in number, and the number of the horse in the last ranke (which containeth the length of the Horse-battaile, and should answer the number of files) but 960, we must seek out 4 proportion to make the length of both equal one to another. The difference then betwixt them in length is 64 men, which in order take up 192 fote. And where there goe foure Phalangarchies to a fourefold Phalange, and 16 troupes of horse are placed behind euery Phalangarchie, we must diuide these 192 fote into foure parts; euery of which parts will amount to 48 fote, and giue to each troupe three fote distance one betwixt an other (for distances betwixt one troupe, and an other, Polybius holdeth necessary) and so shall the 16 troupes of horse take up as much ground in length as a Phalangarchie. The one containing 256 files in length which occupy 768 fote of ground, and the other 240 men in the last ranke, which occupy 720 fote. To which adding 48 fote of distance, there ariseth the even number of 768. And so shall the 64 troupes of horse be even in length with the fourefold Phalange.

The names of the Offices, and Commands of the Horse follow, wherein as I before noted in the fote, we must not presse too neare the property of words, but take them, as they haue beene used among Soldiers.

3 Two troupes are called an Epilarchie. One troupe is called Ile, and the Commander an <sup>o</sup> Ilarch; for so he is termed before in *Ælian*. Two troupes an Epilarchie, <sup>o</sup> Cap. 18. and the Commander an Epilarch, as it were a Commander ouer two Iles, troupes. He hath 128 Horse vnder his command.

4 A Tarentinarchie. Of Tarentines mention is made in the second Chapter. The name of a Tarentinarchie is not given to this Troupe, because it consisted of Tarentines, but because of likelihood the Tarentine horsemen had so many in a troupe. Let it be, as it will, it signifieth here a troupe of 256 Horse.

5 An Hipparchie. Properly signifieth the command of horse, and Xenophon useth the word Hipparch for the Generall of horse; but *Ælian*, and the Tacticks use it for the command of 512 horse.

6 An Ephipparchie. As it were a command ouer two Hipparchies, or ouer 1024 horse.

7 A Telos. The name of Telos is given both to a body of horse, and to a body of fote. A Merarchie was called by some Telos (saith *Ælian* before) and contained 2048 armed. The Telos of horse containeth 2048 horse. So the bodies are equal in number. The word sometimes signifieth a Command, or Dignitie, from which signification this body, as seemeth, hath the name.

8 Epitagma. The whole body of light-armed was called an Epitagma, which name is given likewise to the whole body of horse comprizing 4096 horse. It may be they are both so called, because they are placed behind the Armed, as I noted before. For that place *Ælian* assigneth vnto them.

*The diligence to be used in choice, and exercise of the best formes of Battails.*

## CHAP. XXI.

**T**H E Inventions and conceits of those, that lived in old time, about *Troopes of Horse* are declared, in what forme every one was cast, and for what cause some used one forme, some another. Now it behoueth (as in things that carry with them great difference) not carelessly, and negligently, to rely vpon the bare precepts; but rather by daily exercise to make tryall of every kinde of figure, and so attayning to the perfect knowledge of that, which is readiest, and of most advantage, to admit and receiue it in true fight. For it were great simplicitie, considering in matters of lesse importance men by curious inquiry reach to the exact finding out of many things, herein not to ground vpon perfect and sure experience, before we come to ioyne with the enemy.

*Troopes* may be enlarged or lessened, as it shall seeme convenient to him, that hath the command.

*Of Chariots; the names, and degrees of the Commanders.*

## CHAP. XXII.

**A**S for ordering *Chariots* and *Elephants*, albeit they are worne out of vse, yet to make vp the measure of this discourse, I will remember their names, as they are set downe in ancient writers. In the Art of ordering *Chariots* for the field, they call two *Chariots* a <sup>1</sup> *Zygarchy*; Two *Zygarchies* a <sup>2</sup> *Zyzygi*; Two *Zyzygies* an <sup>3</sup> *Epizyzygi*; Two *Epizyzygies* an <sup>4</sup> *Hartamarchy*; Two *Hartamarchies* a <sup>5</sup> *wing*; Two *wings* a <sup>6</sup> *Phalange*.

A man may vse many and sundry *Phalanges* of *Chariots*, and yet retain the same names in euery *Phalange*. Some haue framed simple *Chariots* to serue without; other some haue armed them with *Sithes* prominent and standing out on each side.

## Notes.

**T**Here were two kinde of *Chariots* used of ancient time, the one a simple *Chariot*, the other a *Chariot* armed with litches. The first kinde was used by the Heroes (as they terme them, that is the renowned Souldiers of old, such as were Achilles, Hector, Cycnus, Eneas, Turnus) as appeareth by Homer, Virgil, Ovid, and other Poets. The last was brought in by the Generalls of later times, especially by those that raigned in Asia, and in Africa. For the <sup>m</sup> Europeans haue counted them fruitlesse, and vaine mockeries, and amongst them you shall hardly finde any mention of *Chariots*. Elian toucheth them onely, because both they, and *Elephants* were in his time growne out of vse. Wherefore I meane likewise to passe them ouer sleightly, onely directing the Reader, that is desirous to vnderstand their manner of fight to places of Historie, where they are mentioned. And first see for their

Forme.

<sup>m</sup> Liv. decad.  
<sup>4</sup> lib. 7. 142. B.

*Forme.* Xenoph. Cyrop. lib. 6. 152. D. E. & 156. B. C. de exped. Cyr. lib. 1. 264. A. B. Liu. decad. 4. lib. 7. 142. A. Diodor. Sicul. lib. 17. 596. Quin. Curt. lib. 4. 119 & lib. 8. 371.

*Their violence,* Diod. Sicul. lib. 17. 593.

*Their place in the battaile,* Xenoph. Cyrop. lib. 6. 168. C. D. Liu. decad. 4. lib. 7. 142. A. Diod. Sicul. lib. 14. 408.

*Remedies against them,* Diodor. Sicul. lib. 17. 592. 593. Xenoph. de exped. Cyr. lib. 1. 265. Liu. decad. 4. 142. Quint. Curt. lib. 4. 141. Plutarch. in Sylla.

*I come to the names of the Commands of Chariots.*

1 A Zygarchie] *The command of two Chariots; as it were a yoke of Chariots.*  
2 A Syzygy] *The command over two yokes, as it were, of Chariots ioyned together; that is over 4 Chariots.*

3 An Epilyzygy] *The command over foure yokes of Chariots, that is over eight Chariots.*

4 An Harmatarchie] *Properly the command of Chariots. But used by Ælian for the command of 16 Chariots.*

5 A wing] *As foote, so Chariots, and Elephants, had their wings of battaile. To the wing went 32 Chariots. Yet finde I this order of imbattailing Chariots no where, but in Ælian. He that will, let him read the places, that I haue noted before, for the ordering of Chariots. Notwithstanding I can not doubt, that the names given here by Ælian, are taken out of ancient writers.*

6 A Phalange] *It consisteth of 64 Chariots; and wee here see, that Chariots also had their Phalanges, as well as foote, and Horse.*

*Of Elephants; the names, and degrees of their Commanders.*

# CHAP. XXIII.

**T**ouching Elephants, he that is Commander of one Elephant is called *Zoarchas*; Of two *Therarcha*, and the body a *Therarchy*; Of foure *Epitherarcha*, and the body an *Epitherarchy*; Of eight *Ilarcha*, and the body an *Ilarchy*; Of 16 *Elephantarcha* and the body an *Elephantarchy*; Of 32 *Kerataarcha*, and the body a *Kerataarchy*. That which consisteth of 64, wee call a *Phalange of Elephants*; as if a man should name the Commander of both the wings *Phalangarcha*.

## Notes.

**T**he use of Elephants was greater amongst the people of Asia and Africa. Those of Europe esteemed them not much. And yet we finde, that they were brought into the field by the Romans also; who first saw Elephants in Italy in the warres: they had against King Pyrrhus. \* The Indian Elephant was preferred before the African for greatness of body, strength, and courage. Many things are written concerning the seruise of Elephants. But because Ælian toucheth no more, then the names of the bodies, and the degrees of Commanders, I will only note such things, as I finde concerning them in Histories. Their kinde of armor, and furniture I haue taken out of Liuy; and expressed them as heere, as I could, in figure.

For

For their power, strength, and manner of fight, see Diodor. Sicul. lib. 17. 609. & lib. 19. 717. Polyb. lib. 1. 35. D. & lib. 5. 423. C.

Their place in battaile, Diodor. Sicul. lib. 17. 685. Arrian. lib. 5. 111. Liu. decad. 4. lib. 7. 141. B. Appian. in Syriac. 107. Polyb. 1. 34. D.

The distance one from an other. Arrian. lib. 5. 111.

Light armed in the distances betwixt Elephant and Elephant, Diodor. Sicul. lib. 17. 609. & lib. 18. 665. & lib. 19. 685. & 716. Plutarch. in Pyrrho.

Remedies against Elephants, Diodor. Sicul. lib. 18. 665. & lib. 19. 717. Polyb. 1. 1. 42. A. Hirt. de bell. African. 416. Liu. decad. 3. lib. 7. 194. C.

I haue noted before the impropriety of names giuen to militarie bodies as well in the armed and the light armed sorte, as in horse troupes, and in Chariots. That defect is no lesse in Elephants. The Commanders and commands of them hauing names, which were at first large, and improper enough, but afterward made good by vse, and receiued by the Tactics as significant to expresse the things, for which they were inuented. The first is giuen to him that is to command one Elephant. Who is called

1 Therarchos ] The Commander of a liuing creature, that is of one Elephant. The next is

2 Therarchos ] A Commander of Beasts: which name is appropriated to him, that commandeth two Elephants, and the body it selfe is named a Therarchie.

3 An Epitherarcha ] Hauing the authoritie ouer the Therarchie and the body is called an Epitherarchie comprizing foure Elephants.

4 An Ilarch ] As it were the Commander of a troupe, and the body is called an Ilarchie. Ile is commonly applied to horse, and signifieth a horse troupe, and Ilarcha the Captaine. But here Ilarcha signifieth the Commander of 8 Elephants.

5 An Elephantarch ] A Commander of Elephants; as though the other bodies before mentioned were not of Elephants. Such straights are men often times driven vnto in deuising new names for new things, which notwithstanding passe afterward and growe familiar by vse. Elephantarcha commandeth 16 Elephants, and the command is called an Elephantarchie.

6 A Keratarch ] The Commander of a wing, the body a Keratarchie, hauing in it 32 Elephants. A wing of Chariots had as many.

7 A Phalange ] This is the greatest body and consisteth of 64 Elephants. But as Chariots may be ordered into many Phalanges, and yet the same names retained in euery one of the Phalanges, so it is in Elephants. For that armies haue had in them at once a-

c Polyb. lib. 1. boue 64 Elephants appeareth by Histories. Polybius, and Diodor Sicul. testifie, \* the first that the Carthagineans, \* the last that King Porus against Alexander had the one 140, the other 130 Elephants in their armies. \* The same Polybius saith that Ptolomey had against Antiochus 73 Elephants in his armie, and Antiochus 102. And \* Plutarch reporteth that Androcortus, King of a part of India, gaue to Seleucus at one time 500 Elephants

The names of military motions expressed in this booke.

#### CHAP. XXIV.

THus haue we set downe in particular the kinds of perfect Forces together with the feuerall names of euery body; Which being premised, it seemeth fit

fit to deliuer the words of exercife, that when the Commander, shall will any thing to be done, the Souldier in daily experience acquainted before with the fignification of euery of them, and with the moouing in each figure may easily performe and execute, whatfoeuer is commanded.

There is a motion called *Cliffs* whereof one kinde is to the Pike, the other to the Target; Another is called *Metabole*; another *Epistrophe*; another *Anastrophe*; another *Perispasmus*; another *Eperispasmus*; besides we say to *file*; to *ranke*; to returne to the first *posture*; to *countermarch*; to *double*. Likewise we vse the words *Induction*; and *Deduction* to the right, or left hand; a *broad-Phalange*; a *deepe-phalange*; and *unenen-fronted Phalange*; and *Parembolè*; and *Protaxis*; and *Embaxis*, and *Hypotaxis*; and *Epitaxis* and *Prostaxis*. The fignification of which words I will shortly deliuer. And yet I am not ignorant, that the precepts of warre are not by all *Tacticks* expreffed in the fame tearmes.

## Notes.

**A** Ælian in the Chapters precedent, hath numbred up all kindes of forces, as well foote, as Horfe, and Chariots, and Elephants, that in ancient time were accounted neceffarie for warre. And hath giuen them their armor, and furniture, and distinguished them into militarie bodies, and imbattailed them, and taught the diftances that they ought to hold in fight. It followeth now that he fpeake of motions military, which are the life of an armie, and onely giue meanes of victorie; and without which all preparation of forces is vaine, and availeth nothing in the field, nor to the end, for which they were leued. This Chapter then containeth the names of thofe motions; the following Chapters the particular explication of them. To which we will note, what we finde in ancient writers. For the fignification of the words, I referre them to the feuerall Chapters, where they are expounded.

Of turning, and double turning the Souldiers faces,  
as they stand embattailed.

## CHAP. XXV.

**C**liffs or turning of the face, is the particular motion of euery Souldier declining his face either to his Pike, that is to the right hand, or to his Target, that is to the left hand. The vse of it is, when the enemy sheweth himselfe in flanke<sup>2</sup> to encompass our wings, or else to charge vs: or for some other cause, whereof I will speake in conuenient place. <sup>3</sup> Two turnings of the face towards the same side transferre the sight of the Souldier to the reare of the battaile. And this kinde of motion is called *Metabole*: being also vsed either to the Pike, or to the Target. In the first standing the mouing of the Souldiers face toward the Pike is called *Cliffs*, the second mouing the same way *Metabole*. For *Metabole* is the conuersion of euery mans face particularly to the place, which was behinde his backe. And the same that *Metabole* is in ech feuerall Souldier, the same is *Perispasmus*, or wheeling about in the whole battaile. There are <sup>4</sup> two kinds of *Metabole*, the one from the enemy, the other to the enemy. *Metabole* is defined to be a changing of euery mans face in particular from the front to the

reare;



*reare*; or contrariwise. Turning about from the enemy is, when the Souldier turneth his face twice towards the Pike; To the enemy, when hee turneth twice towards the Target.

## Notes.

**F**our kinde of Motions are set downe by *Ælian* whereby upon any occasion the battaile may be somewhat changed: Turning of faces, countermarch, wheeling, and doubling, whereof the first may be used in what order soever your battaile standeth the second onely in open order, the third in close order only, the fourth either in close, or open order. Clisis, or turning of faces, whereof this Chapter intreateth, albeit it may be brought in also in open Order; Yet is it not don for the most part but in close order; and then especially, when none of the other motions haue place. The Grecians alwaies conuented to bring their file Leaders, that is their best men, to fight. In open Order they chose to countermarch; In close Order, hauiing place, to wheele their battaile about, and so turne the face of it against the enemy. If they could doe neither of these, they came to the last remedy, which was turning of faces of euery particular man in the battaile.

Clisis, or turning of faces] This motion is of lesse paines then any other, but of no lesse importance, or necessitie. In the rest the Phalange changeth the place, or the forme: In this it holdeth both, and yet is ready for any attempt of the enemy. Onely euery Souldier in particular turneth his countenance to the right or left hand, as he is commanded. To turne his face to the Pike is to turne to the right hand, because that hand bore the pike, to turne to the Target is to turne to the left hand; because the Macedonians caried their targets on their left shoulder. For the use of this turning of Faces, *Ælian* saith, It hath place when the enemy sheweth himselfe in flank

2 To incompasse, our wings] Clisis is no more, then bearing faces to the right, or left hand, that is to our wings. When then we finde our enemies, to incompasse our right wing, wee turne our faces, and weapons that way to receiue him: to the left, when he cometh to charge us on that side. If on both sides, then turne wee the faces of our Phalange halfe to the right, halfe to the left hand; which is the Antistomus Phalange whereof *Ælian* speaketh hereafter. Briefely, there is almost none of the marching Phalanges which are afterwarde described, but it hath neede of this motion. Besides if upon any occasion the Phalange be to moue from any of the flanks, you are only to command Turning of faces to that flanke, and then to lead on. I will giue an example, or two. <sup>a</sup> Alexander at Arbela hauiing imbattailed his armie to fight with Darius, had intelligence, that Darius had throwed the ground betwixt the two armies with Calthropes. He commanded therefore the right wing, which himselfe led, to turne faces to the right hand, and follow him, to the end to go round about, and auoide the places, that were sowed with Calthropes. Darius marching against him to the left hand, disioyned his troupes of horse, and Alexander taking the aduantage, and giuing in quickly betwixt the spaces, put Darius to flight. If Alexander had marched on with the right front, he had fallen upon the Calthropes. To auoide them, he vsed the benefit of this motion, and turning faces to the right hand he led on, untill hee had passed the danger, and then turning againe to the first posture, went to charge, and defeated the enemy. An other example is in <sup>b</sup> Polybius, who describing the battaile betwixt Machanidas the Lacedemonian Tyrant, and Philopomen the Achæan Generall, telleth, that Machanidas hauiing in the left wing put the Achæan mercenaries to flight, followed hard the chase. Philopomen as long, as there was hope, in deuoured by all meanes to stay his men: when he saw them vtterly defeated, hee halted to the right

<sup>a</sup> Polyen. lib. 4. in Alexand. § 17.

<sup>b</sup> Polyb. lib. 11. 634.

right wing, and perceiuing the enemy busie in chase, and the place voide, where the fight had bene, commanding the first *Merarchies* to turne their faces to the right hand, hee led them on with high speede, not yet breaking the order of their imbattailing. And quickly leaping upon the forsaken ground, hee both cut betwixt them, that gaue chase, and home, and withall got the aduantage of the vpper ground against the left wing of the armed. Whereby hee obtained the victory. If Philopomen had in this action vsed wheeling of his battaile, which onely was the other motion, which would haue serued his turne, besides the troublesome of the winding about, he should haue bene forced to haue vsed two wheelings, and so failed of the celerity, which was at that time requisite. Faces were turned in a trice, and he made himselfe Master of the ground, hee desired, before hee could haue wheeled once his battaile.

3 Two turnings of the Souldiers face] Clisis, or turning faces to the right, or left hand, consisteth of one turning and moueth no further, then the side. If the motion be to the reare, it hath two turnings, and is called Metabole, which is defined to bee a changing of euery mans face in particular from the front to the reare, or contrariwise. And as wheeling of the whole body carrieth about the fronts of the battaile to the reare, so doth Metabole turne the face of euery particular Souldier, and maketh him looke from the front to the reare. The word properly signifyeth a change, which happeneth herein, when the souldiers are changed from the front to the reare, or contrariwise. The use of Metabole is principally to resist the enemy that giues on upon the reare. <sup>a</sup> So Pyrrus a Plut. in Pyrrh. thus being entred the Citie Argos with a few, and oppressed with multitude, retired by little and little, and defended himselfe, often turning his and his souldiers faces against the enemy. <sup>b</sup> So the armie of Cyrus the elder retiring from the walles of Babylon, often turned about their faces to the left hand, and waited their enemy, who D. were reported to be on foote, and ready to come and charge them. And if the enemy assault both the front, and reare, it hath bene the manner to continue halfe the souldiers in each file with their faces to the front, and command the other halfe to turne their faces to the reare against the enemy behind. And this forme is called Phalanx Amphistomus described by *Ælian* cap. 38. And sometimes it is vsed to speed our march, and prevent the enemy, as was said before of Clisis. <sup>c</sup> Agesilaus made an incursion into the Territory of the Thebans, and finding a Trench, and Ramper cast vp by the Thebans for defence of their Countrey, and onely two narrow waies betwixt, he cast his armie into a hollow Plinthium, or square, and led it against the left hand passage, whither all the Thebans flocked for defence. But hee turning about faces from the reare, halted away, and gained the other passage, where no man was present to resist, and entring spoiled the Countrey, and returned without impeachment.

4 There are two kinde of Metaboles] Before were rehearsed two kinde of turnings of faces about, one to the pike, the other to the target, here is added two more, one from the enemy, and the other against the enemy; which are all one indeed, and differ onely in name. What the true meaning of these turnings should be, I am in doubt, *Ælian* expanding them one way, Suidas an other. *Ælian* esteemeth them by the right, and left hand, Suidas, about he haue that signification also, esteemeth them by the front and reare. Therefore Suidas defines the turning from the enemy to bee a turning about; toward the reare: that against the enemy, a turning about toward the front. *Ælian* would haue the first to containe two turnings toward the right hand, the second two turnings toward the left. I for my part assent rather to *Ælian*. For touching the turnings of Suidas, I cannot yet vnderstand, why turning toward the reare should be a turning from the enemy; Or toward the front a turning to the enemy: Considering that whether

<sup>b</sup> Polyen. lib. 11. 189. <sup>c</sup> Xenoph. Cy. lib. 7.

whether soeuer you turne faces, the enimie is imagined to be there; faces and weapons being to bee opposed alwaies against the enimie, which is the onely end of turning. Alians opinion seemeth to haue more probability in it, at least if I conceiue the right reason. For I take it thus: That seeing the Græcians (as the Romans likewise) were Targetiers, and carried their targets on their left side, and in fight aduanced that side alwaies neerest the enimie, which they sought to couer with their targets, that therefore the turning about to the enemy, was called turning to the Target; as contrariwise turning to the right side, on which side the Pike was caried, and which being naked of such defensue armes was called the open side, and therefore further removed from the enemy, might for the same cause be termed turning from the enemy. So that I take turning about to the enemy, and turning about to the target to be all one, as also turning about from the enemy, and turning about to the Pike, how soeuer the name differ. This is my coniecture, which I shall imagine to be true, till I finde some man, that will bee pleased to giue me a more probable reason: I only adde now the words of command in this motion.

Faces to the right hand.  
Faces to the left hand.  
Faces about, to the right or left hand. *As you were,*  
*The figure sheweth the manner.*

*Of wheeling, double, and treble-wheeling of the battaile, and returning to the first posture.*

#### CHAP. XXVI.

**E**pistrophe (or wheeling) is when the battaile being so closed, that no man can turne, or twice turne his face by reason of the neerenesse of man to man, it wholly, and jointly wheeleth (as a ship, or some other body caried about) the order thereof remaining vndissolued. When the wheeling is to the Pike, we warne the right-corner-file-leader to stand still (as it were the hooke of a doore hinge) and the rest of the battaile proceeding forward to turne about the same file-leader like the doore. In the same manner is wheeling to the Target; it may be thus defined: *Epistrophe* is, when shutting the battaile by gathering close the Followers, and Side-men, we turne it wholly (as the body of a man) toward the Pike, or Target, it being caried about the corner-file-leader, as about a Center, and, changing the place of the front, transference the countenance of the souldier to the right, or left hand; the followers and sidemen euery one remayning in file and ranke as before. How it is to be done I will shew hereafter.

*Anastrophe*, or returning to the first posture, is the restoring of the wheeling to the place, where the battaile first stood close, before it beganne to wheele. *Perispasmos*, or wheeling about, is the motion of the battaile in two wheelings, so that thereby the front commeth to the place of the reare. *Eperispasmos*, or treble wheeling, is the motion of the battaile in three wheelings, so as, when it turneth to the Pike, the front commeth about to the left flanke; when to the Target, it commeth about to the right flanke.

Notes.

Notes.

**T**his Chapter hath a diuers kinde of turning from the other mentioned in the last Chapter, which for distinction sake, is called *Epistrophe*, or wheeling. The other turned no more, then the souldiers faces, euery man yet keeping the same ground, he had before. This wheeles the whole body, and changeth the place of the Phalange either to the right, or left hand, or to the reare. And as there was in the turning of faces a particular motion of euery particular souldier to the right, or left hand, called *Clisis*, and an other turning about called *Metabole*: so is there in this a generall wheeling of the whole body to the right, or left hand, called *Epistrophe*, and an other wheeling about to the reare called *Perispasmos*. But let vs heare the description.

**Epistrophe** (or wheeling) is, when the Battaille is, when the Battaille is no more, then the first turning of the battaile to the right or left hand. In doing whereof first the files must be closed to the hand, you meane to wheele, then the ranks. Then the corner-file-leader on the same hand is to stand still, then all the rest keeping their files, and ranks closed, to turne to the same hand jointly about the Corner-file-leader circle-wise, who is to moue by little, and little, till he haue turned his face to that side, which was intended. And when the first ranke is euen with him, and the rest wheeled enough to the same hand, they are to stand still: The words of the definition of *Epistrophe* (or wheeling) are plaine enough in Alian; I neede use no exposition. Now because in exercise we relye not upon one forme of motion alone, but acquaint our souldiers with all the kindes; It is necessarie to bring the body againe to the first place, to the end we may proceede in the rest. This reducing to the first posture is called *Anastrophe*, by which the battaile returneth, but by a contrary hand, to that, to which the *Epistrophe* was made. And but for changing the hand the wheeling backe againe is all one with the wheeling forward. Wee shall see hereafter how it is done. To bring the battaile to haue the front, where the reare was, you must use a double wheeling. And that is called *Perispasmos*. Which commeth of two *Epistrophes*, and is made either to the right, or left hand. Onely it must be observed, that if the *Perispasmos* (or wheeling about) be to the right hand, the *Anastrophe* (or reducing to the first posture) must be to the left. Contrarie it is if the *Perispasmos* were to the right hand.

**Eperispasmos** I could neuer hitherto conceiue any use of a treble wheeling (for so Alian takes the word) vnlesse a *Perispasmos* were first made, and the battaile had the front already brought to the reare, and so an *Epistrophe* added from the reare to the same hand. Otherwise seeing that one wheeling is sooner made, then two, and therefore sooner then three, I see no neede of three wheelings; especially seeing we may doe that, wee desire with one. For example, let vs wheele our battaile thrice to the right hand, the front will come to be in the place of the left flanke. The same will be performed as well with one wheeling to the left hand. Et frustra sit per plura, quod potest fieri per pauciora, especially in matter of warre, where the least moment of time often carrieth the whole businesse. The like may be said of *perispasmos* to the left hand.

The use of the motions of wheeling, and double wheeling, is, when the battaile being closed, and the enemy comming to assault you in any other one place, then the front, you seeke to bring the best men to fight. For if you be to be charged in two places at once, or more, wheeling helps little; except it be to turne the front to one enemy, and in that case your onely shift is, to turne faces against them, that come to charge, on what side soeuer they come. Examples of these two motions, I meane *Epistrophe*, and *Perispasmos* meete vs almost in euery Greeke Historie. Of which I will represent one, or two, especially of the latter.

a Plut. in Pyrrh.

latter : the rather because practise giueth both light, and life to precepts. \* Plutarch recounteth, that after King Pyrrhus, had in vaine assaulted Sparta, he was invited by an Arginian named Ariston to receiue Argos into his protection, and that hee marched thitherward with his armie. Arion the king of Lacedemonia laying ambushes for him, and taking the principall streights, by which he was to passe, charged his reare, wherein the Galatians and Molossians were. When Pyrrhus heard the bruite and noise, he sent his sonne Ptolomy with the band of Companions to aide, himselfe with all speede marching out of the streights, led on his armie. The medly being sharpe about Ptolomy, and the chosen Lacedemonians commanded by Eulalus standing close to their busines, Orosius a Candiot of Apera, valiant of his hands, and swift of foote, running crosse against the young Prince gaue him a deadly stroke and ouerthrew him. His fall made the rest to flie. And the Lacedemonians hauing the victorie, and following the chafe came into the Champian ground still killing but not remembering they were followed with armed foote. Vpon whom Pyrrhus, hauing euen then heard of, and being much moued with the death of his sonne, wheeled about the Molossian horsemen. And himselfe first aduancing vpon the spurre imbrued himselfe with the slaughter of Lacedemonians. He alwaies seemed mighty, and terrible in armes; but then he exceeded himselfe in daring and valor. For turning his Horse vpon Eulalus who shunning him, shifted aside, and with all strooke at his bridle hand as he passed by, and wanted but litle of cutting it off. But missing the hand, he light vpon the raines, and carned them quite a sinder. Pyrrhus with all strooke him thorough the body with his Launce. Then leaping from his horse, and fighting a foote, hee cut in pieces the chosen Lacedemonians, that fought to recouer the body of Eulalus. This was the fight that Pyrrhus made by wheeling about his Horsemen against the Lacedemonians, that followed vpon his Reare. Another example of Wheeling about is reported by Polybius, and it is of Amilcar Annibals father, this is the history. The mercenary souldiers of the Carthaginians revolted from them, and ouerthrew some of their Generalls, and shut them vp within the Citie of Carthage, possessing both other streights, that led into the Countrey, and also a bridge laide ouer a riuer called Macar, which riuer was not passable, but by that Bridge. Besides, they built a City for defence of that Bridge. Amilcar seeking to dislodge the enemy from that Bridge, and hauing no way to come at them conueniently; obserued, that when certaine windes blew, the mouth of the riuer toward the sea was commonly filled vp with sand, and would giue passage sufficient for his armie. Finding then a fit time, hee put ouer his army in the night, and before day, or ere any man knew of it, made himselfe Master of the passage; and presently led against them, that held the bridge. Spendius (hee was one of the chiefe Rebels) hearing thereof, aduanced to meete Amilcar in the plaine, and both ten thousand from the City at the bridge foote, and fifteen thousand more from Pica, came out one to aide another, thinking to wrappe in the Carthaginians betweene them; who were not about ten thousand Souldiers of all forts, and 70 Elephants. Amilcar led on his armie. Before were the Elephants, the horse, and light armed followed next, the armed foote came last. And perceiuing the enemy, that followed his Reare, pressed hard vpon him, he commanded his whole armie to turne about. Those that were in the Vanguard of the march hee willed to returne to him with speede; the other, that at first had the reare, hee wheeled about, and straight opposed against the enemy. The Libians and mercenaries imagining the Carthaginians fled for feare, fell vpon them disorderly, and boldly came

to

to hands. But when they saw the Horsemen, being now turned about, and come vp neere to the foote, and already put in order, make a stand, they themselves, by reason they looked for nothing lesse, fell into a feare, turning their backs fled presently, as before they gaue on vnadvisedly, and straglingly. And some of them falling vpon their owne people, that were coming on, wrought both theirs, and their owne destructions: othersome were trampled vpon, and trode to death, by the horse, and Elephants, that followed the chafe. Thus saith Polybius. And thus saith of Wheelings. The figure, and words of command are referred for the 32 Chapter, where the manner of wheelings, and returning to the first posture is set downe.

Of filing, ranking, and restoring to the first posture.

## CHAP. XXVII.

TO file is, when euery particular man keeping equall distance from other standeth in his owne file lineally betwixt the file-Leader and bragger-vp. To ranke is, to be in a right line euen with his sidemen in the length of the battle. To restore to the first posture is, to bring the sight of the Souldier to the same aspect, he had before the first turning. As if his face were at first towards the enemy, being commanded to turne towards the Pike, and thence to returne to his first posture, hee is againe to returne his face toward the enemy.

## Notes:

OF filing, and ranking enough is spoken before.

To restore to the first posture] This motion differeth from Anastrophie before specified. For Anastrophie bringeth backe againe the whole body to the first place after a Wheeling: This the Souldiers faces particularly to the first aspect. So that this is used after the making of an Anastrophie. For alwaies in motions it is requisite, that the Souldiers faces move forward. To move backward hath many inconueniences of stumblings vpon vneuen ground, or stones, or pittes, or stubbes, or such like. Which is the cause that in Anastrophie after a Wheeling, Elian willeth, that the Souldiers turne their faces the contrarie way first, then moue on, till they haue recovered their first ground, then open ranks, and files, and lastly to restore to the first aspect. And as it differeth from Anastrophie so differeth it likewise from Metabole. Metabole only turned faces about, this setteth the Souldier in his former posture, not onely for his face, but for his armes, also, which are ordered as at first. The words wherein this motion is expressed by Elian are Eporthon apodounai, and tis orthon apocatastesai, which is interpreted by Gaza in arrectum reddere, to restore vp right, by Arcerius requiem reddere, to restore right, and so the words sound. Elian interpreteth it so set againe the Souldiers sight in the same aspect in which it stood at first: as if being placed with his face against the enemy he be commanded to turne his face to the Pike, and then againe to restore his face to his first posture, he must returne, and set his face against the enemy. Elian therefore referreth it to the sight, be first had, which if it bee the right meaning, how can it

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## The Tactics

a Pausan. in  
Atticus 41.  
b Pausan. in  
Corinth 89.  
c Pausan. in  
Corinth. 87.

be upright, or right, more in that, then in any other posture. For the Souldier not onely in front, but in flank, and in the rear carrieth himselfe upright, or right. I doubt not, but this is may be applied to the upright standing of men, as appeareth by sundry places of Paulanias: Who reherfeth, that Minervas image set<sup>a</sup> in the Temple Parthenion standeth upright, orthon est, and in another place, that in Corinth<sup>b</sup> in the Temple Pantheon, there were two Images of Mercurie standing upright, Ortha, <sup>c</sup> and that in the Temple of Fortune the image of Fortune was carved of Parian stone, and stood upright: Orthon: and that in Neptunes Temple situate in the Corinthian Isthmus, the images of Amphitrite and Neptune stand in a Chariot, and the boy Palemon upright upon a Dolphin, Orthos. In all which places Orthos designeth the site of men. But here, as I take, it cannot be so applied. Because in every motion, not onely in this, the men stand upright. How then can they be restored to their standing upright, when they doe it already. I take the originall of the appellation to come from another cause, and that is from the ordering of the Pike. For when the battaile is first set in the field, every Souldier standes with his Pike ordered, that is upright. For to order a pike is to set the butt end on the ground before the Souldier somewhat wide of his right foote, and to hold it upright with the right hand borne even with the shoulder. But when you beginne, or continue any motion, the manner is to advance, or to shoulder the Pike, and so to proceede. But being commanded to returne to the first posture, it must be ordered againe. So that the first posture of an armed man is to stand with his pike upright. And after many motions and windings, he at last returneth to the same posture, which I take the command of Ep'orthon apudounai to signifie. Now that I may not seeme to relie upon a probable conjecture alone, I will bring witness for the confirmation of my opinion. It is reported by<sup>d</sup> Diodorus Siculus, that Ageilaus the Lacedemonian King with an armie of eighteen thousand foote, and fifteen hundred horse, invaded Beotia. The Athenians before hearing of Ageilaus coming had sent five thousand foote, and 200 horse to aide the Thebans, who gathering their armie together seized upon a long narrow hill distant 20 furlongs from the City; And making the hard access to the place a kinde of fortification against the enemy, they there waited his coming, fearing to hazard upon even ground in regard of the renowne, and glory of Ageilaus. Ageilaus, having imbattailed his troupes, led them against the Thebans; and approaching neere, sent his light armed to sound their disposition to fight, which being easily repulsed by the Thebans by the advantage of the higher ground, hee advanced the rest of his forces being imbattailed in such manner, as might give greatest terror. Chabrias the Athenian willed his Souldiers to awaite the enemy contemptuously both keeping their first array, and their Targets at their knees, and continuing their Pikes upright ordered; who when they jointly as upon a word given, did as they were commanded, Ageilaus both wondering at the good order, and at the assured fashion of the enemy thought it not fit to strive with unequal ground, and by forcing them to fight, to compell them to be vallant, whether they would, or no. Hitherto Diodorus Siculus of the Stratagem of Chabrias against Ageilaus, which consisted in the contempt of Ageilaus, and all his forces: First in not stirring one foote, to meete the enemy, then in keeping the array they held before; further in sincking their Targets to their knees; Lastly in continuing the former order of their Pikes, that is not making ready for charge, but remaining with their Pikes ordered, as they were at first. Ageilaus advancing his armie thought to strike a sower into his enemy; Chabrias trusting to the strength of the place, scorned the Brando of Ageilaus, conceiving, he would not be so hardy to adventure the fight upon so great an inequality of ground. He therefore willed the

souldiers

d Diod. Sicul.  
lib. 15. 473.

diers not to alter their posture, but to continue as they were. The words concerning the Pike are: En ortho to dorati menein. That is to continue their pikes vpright (En ortho) Now whether the same be the posture, that the Tacticks describe, when they speake or restoring Ep' ortho, vpright, I referre to the iudgement of the Reader. <sup>a</sup> Polienus remembreth this Stratagem vseth somewhat different words, and yet consenteth in meaning. Chabrias saith he, commanded his Souldiers not to runne out against the enemy, but quietly to stand still holding their pikes before vpright, and their Targets before their knees which they were wont to doe, when they would a little ease themselves of the weight of their Targets. Where Diodore, bath en ortho to dorati menein, to continue their Pikes vpright. Polienus hath protinomenous ta dorata ortha, holding before them their Pikes vpright. But both haue pikes vpright; and Diodorus his Continue hath relation to the Posture they were in, which Chabrias would not haue them to alter: Polienus his hold before to that they were commanded to doe. In ordering of Pikes at this day I haue shewed, that the Souldiers hold them vpright, the butt end set on the ground before, and somewhat wide of their right foot. <sup>b</sup> Æmilius Probus reciting this historie peruerteth the Stratagem: He saith that Chabrias forbad the Phalange to giue backe, and taught his Souldiers to receiue the enemies charge kneeling with one knee, the other set against the Target, and with the Pike abased. Wherein hee quite dissenteth from Diodore, and Polien. Diodore saith the command was to keepe their array; Polienus not to runne forward, but quietly to stand still; Probus not to giue backe. Probus saith, they should kneele with one knee, and rest against the Target with the other; Diodore that they should hold their Targets sunke to their knees; Polienus that they should carry their Targets before at their knees. Probus that they should abase, and charge their Pikes; Diodore that they should continue, and order them vpright; Polien that they should hold their Pikes vpright. So that Diodore and Polien agree, and expound one another: Æmilius Probus bringing in a new historie dissenteth, as I said, from the other two; especially in making that to be a forme of fight prescribed by Chabrias (a simple forme to receiue the charge upon their knees) which was a contempt, to shew how little, especially in that strength of ground, he regarded Agefilaus; which contempt also made Agefilaus retire, not doubting but it proceeded from a great assurance of the enemy. Therefore as I said I take these words ep' orthon apodounai, not only to appertaine to the aspect of the Souldier, but also (and that much rather) to the erection, and ordering of Pikes.

<sup>b</sup> Æmil. Prob.  
in Chabrias.  
105.

of Counter marches, and the diuers kindes thereof, with the manner how they are to be made.

#### CHAP. XXVIII.

There are two sorts of Counter marches, one by file, the other by ranke; each of these againe is diuided into three kindes. The first called the Macedonian: The second the Lacedemonian: The third the Choraan, which is also the Persian, and the Cretan. <sup>1</sup> The Macedonian is that, which leauing the ground; it first had, taketh in lieu thereof the ground; which was before the front of the Phalange, and turneth the aspect of the Souldier backward [ where before it was forward.]

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2. The *Lacedemonian* is that, which leauing likewise the ground it first had, taketh in steed thereof, the ground which was behinde the Reare of the *Phalange*, and turneth also the face of the Souldier the contrary way.

3. The *Persian* is the *Cretan*, and *Choraan* : This keepeth the same ground of the *Phalange*, euery souldier taking another place for that, he had, the file-Leader the place of Bringer-vp, and so the rest in order ; and turneth also the face of the Souldier the contrary way.

4. *Counter marches* by ranke are made, when a man would transferre the winges into the place of the Sections ; and the Sections into the place of the wings, to the end to strengthen the middest of the battaile. Likewise the right hand parts into the left hand parts, and the left hand parts into the right hand parts. They that feare to countermarch the *Phalange* in grosse the enemy being at hand, doe it by *Synagmas*.

I will now let downe, in what manner countermarches ought to be made.

The *Macedonian countermarch* by file is said to be, when the file-leader turneth about his face, and all the rest with the Bringer-vp go against him on the right, or left hand, and passing on to the ground before the front of the *Phalange* place themselves in order one after another, according as the file-Leader himselfe hath turned his face. Therefore it maketh shew to the enemy appearing in the Reare, of running away : Or it is when the file-Leader turneth about his face, and the rest passing by him on the right or left hand place themselves orderly one behinde another.

But the *Lacedemonian* is, when the Bringer-vp turneth his face about, and all the rest turning also their faces, and proceeding forward together with their file-Leader order themselves proportionably in the ground, which was behinde the Reare of the *Phalange*. Wherefore to the enemy appearing behinde, it makes a semblance of falling on. Again the *Lacedemonian* is, when the file-Leader turning his face about to the Pike, or Target transferreth the whole file to another place equall to the first ; and the rest following stand, as before, behinde him. Or else, when the Bringer-vp turneth his face about, and hee, that stood next before him, passing by on the right or left hand, is placed againe next before him, and the rest following are placed one before another in their former order till the file-Leader be the first.

The *Choraan* is, when the file-Leader turning about toward the Pike, or Target, precedeth the file, and the rest follow, till the file-Leader haue the place of the Bringer-vp, and the Bringer-vp the place of the file-Leader. And these are the *Counter marches* by file.

In the same manner are *Counter marches* made by ranke in case a man would countermarch by ranke. For euery ranke *Counter marching* either keepeth the same ground, or changeth the right hand place, or else the left hand place, of the battaile, one of which must needes fall out, and neuer faileth,

### Notes.

**T**He two former motions are performed, one in close Order, the other in all Orders ; Epistrophe when the battaile is (but so close, that (as *Ælian* saith) a man can turne his face neither the one way, nor the other. Clisis in open Order, Order, and close Order.

See Leo cap. 7. The two following motions, *Counter march*, and *Doubling*, one is done in open Order, the other for the most part in open order too ; and yet sometimes in Order, and close

close order; as we shall see in due place. This Chapter handleth Countermarches, the next Doublings. Countermarch is a motion, whereby every souldier marching after other, changeth his front for the reare, or one flankke for the other. For there are two kindes of Countermarches, one by file, and the other by ranke. And each of these is againe divided into three; the first called the Macedonian; the second, the Lacedemonian; the third the Chorean, or Cretan. A Countermarch by file is, when every souldier followeth his Leader of the same file; By ranke, when every souldier followeth his sideman of the same ranke in the Countermarch:

1 The Macedonian Countermarch ] In this Countermarch, the purpose of the Commander is to turne the front of his battaile against the enemy that sheweth himselfe in the Reare; and withall to take the ground that lyeth before the front of the Phalange. It is called the Macedonian Countermarch (saith Ælian) because the Macedonians were the inventers of it. Which of the Macedonians he telleth not, but excludeth Philip, and Alexander, who both used the Lacedemonian Countermarch. And before their times I have not read of any warlike Kings of Macedonia. The manner of it is this; First all the File-leaders turne their faces about either to the right or left hand; then the next ranke passeth thorough by them on the same hand; and being come to their distances, place themselves directly behind their File-leaders, and then turne about their faces the same way. And so the third ranke after them, and the fourth, and all the rest, till the Bringers-up be last, and have taken the reare of the battaile againe, and turned about their faces. The figure expresseth not well the action. For in it the Bringers-up begin first to countermarch, which according to Ælian should moue last. Yet may this Countermarch be done, as the figure is. But I take Ælians way to be easier, and readier. And it may be also, that the Countermarch expressed in the figure is lost in the text. For one of the Lacedemonian Countermarches, which precedeth the contrary way, beginneth the motion with the File-leaders, as this doth with the Bringers-up, as wee shall straight see.

2 The Lacedemonian countermarch ] In this Countermarch the proceeding is contrary to that of the former; that tooke the ground before the Phalange, this takes the ground after. In that the moving was from the Reare to the front, in this from the front to the reare. This is the invention of the Lacedemonians. Ælian describeth it to be done in two manners: One, when the Bringers-up first turne about their faces, and the next ranke likewise turning faces beginneth the Countermarch, and every man thereof placeth himselfe directly before his Bringer-up, and the third doe the like; and so the rest, till the ranke of the File-leaders come to be first: The other, when the File-leaders begin the Countermarch, and every one in their files follow them orderly. The figure expresseth this last. Ælian preferreth the Lacedemonian Countermarch before the Macedonian: because in it the souldiers seeme to fall on, and goe to the charge; where in the Macedonian they seeme to flee. There are notwithstanding times, when it is better to use the Macedonian. As in case you meane to march on, and not to fight with the enemy, except you be compelled: Or else you seeke to gaine some ground of advantage. For the Macedonian continueth still the march, and stayeth not; the Lacedemonian returneth upon the enemy, and so loseth ground in marching. Agésilas after victorie gotten against the Argives, against whom he stood in the right winge, hearing that the Thebans had beaten the Orchomenians in the left winge, used the Lacedemonian Countermarch against them. The words of Xenophon sound thus: Here the strangers were about to crowne Agésilas (thinking he had got the victory) when newes was brought that the Thebans, after they had broken the Orchomenians, had forced a passage as farre as the baggage. Then Agésilas, countermarching his Phalange, led against them.

The

See Leo cap. 12.

§ 95.

Xenoph. Hist.

Theb. lib. 4.

§ 19. C.

The Thebans perceiving their Confederates were fled vp to the mount Helicon, closed their troupes together, as neare as they could, seeking to open a way by force, and to get vp vnto them. Ageſilaus albeith might by giuing way to the formeſt haue followed them at heeles, and charged the reare, yet did he it not, but met the Thebans front to front. Thus encountering, and clashing their Targets together they fought, thruſt on, killed, and were killed. In fine ſome of the Thebans broke thorough to Helicon; other ſome, as they fought to eſcape, were left dead on the place. Ageſilaus here followed the chace toward the Argives toward the mount Helicon: The Thebans vpon the Orchomenians the contrary way towards the enemies Campe. The Thebans ſeing their confederates fled to the mount Helicon, returned toward them, Ageſilaus counter-marched to meete them, met them, and fought with them. For the Counter-march he uſed, I make account it was the Lacedemonian, himſelfe being a Lacedemonian. And he uſed it to meet the Thebans brauely in front. The ſame

Xenoph. hiſt.  
græc. lib. 6.  
605. D.

Ageſilaus, after he had by night incamped in a peece of ground behind Mantinea incompaſſed about with mountaines, perceiving the next morning, that the Mantinians gathered together vpon the toppes, that lay right ouer the head of his Reare-gard, determined to lead his Armie out of the place with all ſpeed. Now if himſelfe ſhould lead, he feared the enemy would giue vpon his Reare. Therefore ſtanding ſtill, and turning his armes againſt the enemy, he commanded the laſt of the Phalange to march backe againe from the Reare, and come vp to him; and ſo at once he brought his Armie out of the ſtraights, and made it by little and little ſtronger. When the Phalange was thus doubled, he proceeded in that order into the Champaigne, & there againe reduced the depth of the armed foote to 9 or 10 men in euery file. This place of Xenophon, if it be not corrupted, is very obſcure. And I cannot tell whether to take it for doubling of the front, or the Macedonian counter-march. The words make for a doubling. For Xenophon ſaith plainly, the Phalange was doubled. Beſides he addeth, it was made by little and little ſtronger; which could not be done with a Counter-march. And that a deepe Phalange, or Hecart, (ſuch as this by the euening's march, and the ſtraights it entred, ſeemeth to be) is made ſtronger by doubling the front, there is no queſtion. On the other ſide, the ſtraights, thorough which it was to paſſe, perſwade me, it ſhould be a Macedonian Counter-march. For in doubling the front the length ſtill increaſeth; & the manner is not to enlarge, but to extenuate the front, when an Armie is to be conueighed thorough a narrow place. And Xenophon ſaith expreſſly, that Ageſilaus led it thorough the ſtraights into the Champaigne in that order, to which it was reduced laſt; & that in the Champaigne the depth of the Armie was leſſened, and brought to 9 or 10; for there Ageſilaus imbailed his Phalange to receive the enemy, if he would charge. And in a march through ſtraights waies the front is commonly narrowed, and proportioned to the way; but in open ground the Phalange is againe brought to the iuſt length. So that it ſeemeth the depth was much, before it came into the plaine; becauſe in the plaine it was brought to 9 or 10 men, and therefore no doubling. Laſtly Ageſilaus, (and the front I doubt not of the Phalange with him) turned face to the enemy, before the Reare came vp to him, which is done in no other motion than the Macedonian counter-march. In which all the File-leaders firſt turne about their faces toward the enemy, and then the whole battaile marcheth againſt the File-leaders, and placing themſelves orderly behind them, turne their faces the ſame way, that they haue done before. Now where it is in Xenophon, that Ageſilaus hauing gained the Champaigne, extended his Armie to 9 or 10 Targets, I ſuſpect a fault to be in the number of 9; and that it ought to be read 8 or 10. To extend a Phalange is to draw it out in length, the length is the ſpace betwixt the point of both wings. When he ſaith he extended it to

10, the meaning is he drew it out ſo farre in length that he left but 10 in depth. Ten is the decas, whereof I ſpoke before, and I haue likewiſe noted, that the Lacedemonians for the moſt part, made the depth of their battail 8. The number of 9, as all other vntion numbers, was reſected by the Tactics, as vniſ for doublings. So that mine opinion is that Xenophon at the firſt wrote 8 or 10, not 9 or 10, howſoeuer 9 be crept into the place of 8. But to returne to Ageſilaus, admit he uſed doubling of ranks, or of the front in retiring out of the Mantinian ſtraights, y<sup>e</sup> giue me leave to be of opinion, that the Macedonian Counter-march had bene the ſureſt motion for that purpoſe. For himſelfe being thereby caſt in the reare, he had both preuented the charge of the enemy (which he feared) and yet wounde better out of the ſtraights, the long Hecle, which ſtill remained in the Macedonian Counter-march, being more proportionable to iſſue out of a narrow place, then a broad-fronted Phalange, which ariſeth out of doubling the front.

3 The Perſian is the Cretan or Choræan ] This Counter-march is called the Perſian, and Cretan, becauſe it was uſed amongſt the Perſians and Cretans. And it was termed the Choræan alſo, of the ſimilitude it had with the ſolemne Græcian dances vpon ſtages; the company, that ſhewed themſelves in ſuch dances being called Chorus. Who in their dances ordered themſelves into files, and ranks, as ſouldiers doe in battaile, and moving forward to the brinke of the ſtage, when being ſtraightened by the place, they could paſſe no further, they retired one through the ranks of the other, exceeding not the bounds of the place, as is done in this Counter-march. The other two kinds of Counter-march changed the ground, they had before. The Macedonian took the ground before the front; The Lacedemonian the ground after the reare. The Choræan holdeth the ſame ground, & beginneth the motion with the File-leaders, who notwithstanding proceede no further, then thither, where the Bringers-up ſtood, their files following; them, & euery ſouldier keeping the ſame diſtance, he had before the moving. The figure ſhewes the manner of it. <sup>a</sup> Theſe Counter-marches by file, are to be made, when the enemy appeareth in the reare, and cometh to charge vs. And they are made to the end, to bring our beſt men, that is the File-leaders to the encounter. Wherein notwithstanding there is a caution to be held, that if the enemy be very neare, or ſo neare, that we cannot conveniently counter-march, before he come vp to vs, we forbear, leſt we fall into diſorder, and in diſorder be eaſily defeated. In which caſe the beſt remedy is to turne faces about, and ſo receive him. Hübarto of Counter-marches by file.

4 Counter-marches by ranke are made ] The ends of Counter-marches by ranke are two in Elian: one to ſtrengthen the middeſt of the battaile, the other to ſtrengthen the wings. If the ſtrength of the enemies battaile, lie moſt in the middeſt, reaſon of Warre would, that we ſhould oppoſe our greateſt ſtrength againſt the middeſt. If in the wings againſt the wings. There is an other cauſe of ſtrengthening the wings, namely if the enemy be ready to charge either of them: and this ſtrength Elian would haue giuen by the Counter-march of our beſt men into the wings. It ſhall not be from the purpoſe to make all plaine by an example or two. <sup>i</sup> Herodotus reporteth, that before the battaile of Platæa betwixt the Græcians, and the Perſians, it was agreed betwixt the Athenians, and Lacedemonians, that where the Athenians had vanquiſhed the Perſians in the battaile of Marathon, and had lately ſlaine Maſſilius the Generall of the Perſian horſe; and by thoſe encounters had good experience of the Perſian manner of fight; and where the Lacedemonians were imbatallied in the right wing againſt the Perſians, the Athenians in the left wing againſt the Thebans, and other Græcians, that tooke part with the Perſians: they ſhould change, and the Athenians haue the right wing, the Lacedemonians the left.

Herodot. in  
Calliopezæ 246.  
& Platææ in  
Anſide.



These newes were caried to *Mardonius* the Generall of the Persians; who whether fearing the Athenians, or desirous to fight with the Lacedemonians, changed his place from the left into his right wing, to the intent to oppose against them; which when *Pausanias* saw, he returned to his right wing, and *Mardonius* to his left, the place, which he had at the beginning. *Here are changing wings on both parts; The one counting to fight in the left wing, the other desirous to fight in the right. The Countermarch by ranke from the right wing would haue fitted Pausanias: as the contrary Countermarch would haue fitted Mardonius. Yet am I led to thinke that Pausanias used a wheeling of his battaile, and so conuinged it from one wing to another behind the battaile of the other Grecians, so the end, that being shadowed by them, hee might the better hide his purpose from Mardonius. An other example I finde in Livy and Polybius both. It is this: Pub: Scipio, who was afterward called Africanus, and Asdruball the sonne of Gisgo, being incamped neare together in Spaine brought daily out of their Campes their Armies one against another. And after they had long stood waiting, who should begin the fight, which was done at neither hand, they conuinged them backe againe. The manner of their imbattailing was this. The Romans, and likewise the Carthagineans mingled with the Africans, had the middle, their Confederates the wings. The opinion was they should fight in that order. Scipio when he perceived this to be firmly beleued, the day before he went to fight, made an alteration of all. When night came, he gaue the word thorough the whole Campe, that horse, and men should dine, before it was light day, and that the horsemen in Armes should keepe their horses bridled, and sadled. The day was scarce sprunge, when he sent his horse, and light-armed to beat in the Carthaginean Gardes, himselfe streight followed with the armed Legions; disposing the Romans (contrary to the settled opinion of his owne people, and of the enemy) in the wings, and receiuing the Allies into the middlest. Asdruball raised out of his bed with the cry of his horsemen, had no sooner leaped out of his Tent, and seeing the tumult before the trench of his Campe, and the amazement of his people, and the Ensignes of the Legions shining a farre off, and the field full of enemies, presently sent out his whole power of horse to vndertake the Roman horse. Himselfe issued out of the Campe with his foote, not changing any thing of his wonted manner of imbattailing. The fight of the horsemen had now a long time beene doubtfull, and could not be tried, because still, as they were beaten (which hapned a like to both) they found a safe retreat within the battailes of foote. But when the Armies were come within 500 paces one of another, Scipio giuing a signall of Retreat, and opening his battaile, receiued all the horse, and light-armed into the middlest, and diuiding them into two parts, placed them as seconds, behind the wings. Now when time was come to begin the fight, he commanded the Spaniards, who had the middle ward, to march on leasurly, and sent a messenger from the right winge (for hee commanded there) to *Syllanus* and *Martius*, willing them to stretch out the left winge, as they saw him stretch out the right; and to charge the enemy with the light-armed, and horse, before the middle wards might be able to come vp, and ioine. The wings being thus stretched out, they led with all possible speed three Cohorts of foote, and three troupes of horse a peece, against the enemy, besides the light-armed, and those that were receiued into the Rere, who followed a thwart. There was a great empty space in the middlest, because the Ensignes of the Spaniards came slowly on. And now the wings were in fight, when the old souldiers Carthaginians and Africans, the strength of the Armie, were*

not

not yet come to vse their darts, neither durst they runne into the wings to helpe them, that fought for feare of opening the middlest of the battaile to the enemy, who was coming on against them. The wings were pressed with a double medley. The Horse, light-armed, & Velites, wheeling about their Troupes, charge their flanks. The Cohorts pushed on in front, to the end, to breake of the wings from the body of the battaile. And the conflict was vnequall both in all other respects, and especially because a rable, as it were of drudges, and vntained Spaniards, were opposed against the Roman and Latin souldiers. The day being now farre spent, the Armie of Asdruball oppressed with the mornings tumult, and compelled to take the field, before they had strengthened their bodies with meat, began to faint, and faile in strength; which was the reason that Scipio lingered out the day, & made the fight somewhat late. For it was past the seuenth houre, before the winges of foote attached one another: and yet the fight came later to the middlewards. So that the scorching heat of the sunne, and the labour of standing armed, and hunger, and thirst, first afflicted their bodies, before they came to hands with the enemy. Therefore they stood leaning vpon their Targets, and being weary both in body, and minde, they gaue backe at last; keeping notwithstanding their array no otherwise; than as if the battaile being yet entire, had retreated at the commandement of the Generall. But when the victors, perceiuing them to shrink, so much the more eagerly pressed on, the brunt could hardly be indured any longer. And although Asdruball restrained, and stopped them, that gaue ground, crying that hills and a safe place of retreat was at their backs, if they could be but intreated, to retire easily; yet feare ouercomming shame, and the enemy killing them that were next to hand, they forthwith turned their backs, and vniuersally powred out themselves into flight. This stratagem of Scipio resteth principally in shifting his best men (the Romans) into the winges; the Spaniards his worst into the middlest; and in keeping the Spaniards aloote from ioining; and in hastening to try the day with the Romans against the weakest of the enemy. Asdrubals way to meete with this stratagem had beene to countermarch by ranke halfe his Carthaginians, and Africans into one winge, and halfe into the other. And by that means his Spaniards should haue had the middlest against the Roman Spaniards, and his old souldiers Carthaginians and Africans beene opposed in the wings against the Romans, and Latins, and the advantage eluded, that Scipio sought.

As the Countermarches by file were of three kinds, so are the Countermarches by ranke; namely the Macedonian, the Lacedemonian, and the Chorean. The Macedonian beginneth to moue at the corner of the wing, which is nearest to the enemy, the enemy appearing to either flanks. And therefore incurreth the same imputation, that was laid vpon the Macedonian Countermarch by file; as seeming to runne away, because it dimarcheth from the enemy. Yet is there vse of it, as well as of that by file. For by this countermarch you may set the strongest part of your Armie against the enemy, and apply the weakest to some River, Lake, hill, or such like, so that the enemy can not come to incompasse it. It taketh the ground that lyeth on the side of the contrary wing. The Lacedemonian taketh the ground that lieth on the side of that wing, which is toward the enemy, and bringeth the best men to be foremost against the enemy: And therefore beginneth the moving on the contrary side. The vse of it is, when your forces are such as are able to encounter the enemy, and you desire to bring your best men to fight. The Chorean keepeth the same ground, the battaile had at first, & bringeth one wing to possess the place of the other; Or else the Sections to possess the place of the wings, as might haue

beene

## The Tactics

beene done in the last example cited concerning Scipio and Asdrubal. The manner of countermarch by ranke is contrary to the countermarch by file. In countermarch by file the motion was in the depth of the battaile, and either the front removed toward the reare, or the reare toward the front, and tooke one an others place. In this the motion is in length of the battaile flanke-wise; the wing either marching into the midst, or else cleane thorow to the other wing. In doing it the souldiers that stand outmost in the flanke of the wing, must move first to the contrary wing, and the rest of every ranke severally follow them in order. The figure will shew the manner of the motion. Patritius utterly mistaketh the countermarch by ranke; and groundeth himselfe upon a wrong principle, namely that in all Countermarches the File-leaders must march toward the reare, and the Bringers-up towards the front. And therefore in changing the wings into Sections, he makes the wings to fall off behind in the reare (the File-leaders wheeling about) and there to ioyne themselves as reare, as the middle Section will give leave, and the Sections falling backe likewise, to ioyne themselves to the flanks of them, that were the wings. Whereas the nature of this Evoluntion is clearely to leave the File-leaders in front, and Bringers-up in reare, as they were at first. And albeit the File-leaders then change their places, yet change they their place with none, but with File leaders, and the change is, but a change of hands, the right hand for the left, or the left hand for the right. For whereas the File-leaders of the right wing had before the right hand, now in countermarch by ranke, being transposed to the left wing, they have the left hand of all the rest of the File-leaders; as likewise the Bringers-up of the other Bringers-up.

The words of Command may be these,

For the Macedonian Countermarch by file.

*File-leaders turne your faces about (to the right or left hand).*

*The rest of every File passe thorow in order one after another, and place your selves at your distances after your Leaders, turning your faces about; and so stand.*

For the Lacedemonian Countermarch by file.

The first manner.

*Bringers-up, turne your faces about (to the right or left hand.)*

*The rest turne your faces about and beginning at them, that are next to the Bringers-up, countermarch and place your selves in your distances before the Bringers-up, and one before an other till the File-leaders be first.*

The second manner.

*File-leaders, countermarch to the right, or left hand, and let every mans file follow him, and keepe true distance.*

For the Chorgan countermarch by file.

*File-leaders, countermarch to the place of the Bringers-up, and stand, and let your files follow you keeping their distance.*

For the Macedonian countermarch by ranke.

*The right or left hand corner file, turne your faces to the right, or left hand.*

*The rest of each ranke, passe thorough to the right, or left hand; and place your selves orderly behind your side-men keeping your distance.*

For the Lacedemonian countermarch by ranke.

The first manner.

*The corner file, where the enemy appeareth, turne your faces to the right or left hand; The rest of each ranke turne your faces, and passe thorough, (to the right or left hand) and place your selves before your side-men orderly keeping your distances.*

The second manner.

*The right or left wing, where the enemy appeareth not, countermarch to the contrary wing, and all in the Ranks follow every man his side man; keeping your distance.*

For the Chorian countermarch by ranke.

*The uttermost corner file of the right, or left wing, countermarch into the place of the left or right wing, and stand. And the rest follow ranke-wise keeping their distance.*

Of doubling, and the kindes thereof.

# CHAP. XXIX.

<sup>1</sup> **T**Here are two kinds of doubling, one of *Ranks*, the other of *Depth*, or *files*: and <sup>2</sup> either of these double the number, or the place. <sup>3</sup> The length is doubled in number when of a front of 124 files we make a front (keeping the same ground) of 248 files, by inserting in the spaces betwixt file and file, some of the followers, that stood in the depth. This is done to the end to thicken the length of the battaile. If we list to recall them to their first *posture*, we are to command those, that were inserted, to *countermarch* to the place, they had before:

<sup>4</sup> There are, that mislike these *doublings*, especially the enemy being at hand; and would have a shew of doubling made, without indeed doubling the *Phalange* already ordered, by stretching out the *light-armed*, and the *Horse*, on both sides of the *wings* of the *Battaile*. <sup>5</sup> The use of doubling the length is, when either we would *over-wing* the enemy, or else our selves feare to be *over-winged*.

The *Depth* is doubled <sup>6</sup> by inserting the second file into the first; so that the *Leader* of the second file be placed next behind the *Leader* of the first file, and the second man of the second file be the fourth man of the first file, and the third man of the second file be the sixth in the first file, and so forth the rest, till the whole second file be ingrossed into the first; and likewise the fourth file into the third, and all the even files into the odde.

*Doubling* of the *Depth* by *Countermarch* is made, either when the next *side-files* in general [as in the former example the second, and the fourth, and the rest of the even files] *countermarch* to the *Reare*, and place themselves behind the *Bringers-up* of the odde files; or else the files remayning in their first place, and number, halfe of them, dividing themselves from the other halfe, *countermarch* likewise to the *Reare*, and conveying themselves behind the other, there order themselves, and so double the depth of the *Phalange*.

If we would returne them to the first *posture*, we must recall those, that were conveyed to stand behind, to the place they had before the *Countermarch*.

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Notes

## Notes.

**T**HE former three Motions alter not the forme of the Phalange. For whether you turned faces, wheeled, or counter-marched the Phalange, the depth and length remained one. The motion to be expressed in this Chapter induceth an other shape to the Phalange; and maketh it seeme a different body from that it was before, being by Doubling extended either in length or in depth. For Doubling the number of men, or the place of the Phalange in front, maketh the length twice as much, and doubling the same in flank maketh the depth double to that it was before. For Doubling is nothing else, then making a military body twice as long, or twice as deepe, as it was before.

1 There are two kinds of doubling. The Doublings are either of length or depth; Or (which is all one as Suidas saith) of ranks or files. For ranks stretch out in length, files in depth. And these againe are diuided into two other kinds, the body being

2 Doubled in number or place. That which is here called number, is called elsewhere persons; or (by Suidas) men. It is called persons in the Inferiour which is made to Ælian, I know not by whom, in the precedent Chapter of Countermarches. Which because it lay thrust in betwixt the description of Countermarches, and nothing pertained to that argument, I neuer made doubt, was crept into the text. And I am rather confirmed in my opinion, because I saw it noted with an Alteriske in that Ælian (being of Robertellus Edition) which the learned Isaac Casaubon had quoted, and purposed to see forth, if untimely death had not prevented him. I will here set downe the words, because they differ not much from Ælian, and may giue some light to the manner of Doubling. It is to be vnderstood (so are the words) that a Phalange is doubled in persons, or place. when we therefore take halfe the souldiers from the Depth, and making files of them, place them euen with the rest in length of the front, so that of 124 files we make 248, this is Doubling of persons. In like sort we double the place with 124 files (not increasing the number) but onely commanding some to turne to the Pike, some to the Target, till the Phalange be stretched out to a convenient length, as from 5 furlongs to 10. In the same manner is the depth doubled. For either one file is inserted into an other, man for man, so that the second File-leader becomes the follower of the first, and the second man in the second file, the follower of the second in the first file, and so the rest: Or else 16 men are so extended, that they hold as much ground in length, as 32 usually doe. So farre the inferiour. It followeth in Ælian.

3 The length is doubled in number. When the front hath twice as many files, as it had before, this is Doubling in number, or in men, or in persons. For the persons, or men, make the number in the files. And the files carrying an euen depth of men, and being doubled, double the number of the front, or length. Ælian speaketh but of one kinde of doubling, namely of number, and that must be done in open order, as I said before. For the files of 16 standing in open order if you command the Middlemen (as we terme them at this day, they were called in the Macedonian files the third Enomotarchs) to double their ranks: These middle men with the hinder halfe file march vp to the front, & so doubling the front in number leaue yet the same measure of length. The figure sheweth how it is done. Yet are there two other waies, when the Phalange standeth in close order, both which double the number, and place. One is when the Middlemen diuide themselves, and one halfe with their followers turning their faces march out of the right flank: The other of the left flank of the Phalange. And then turning their faces againe,

seceue

seceue vp and ioynne themselves in an euen line with the File-leaders in front; The other when all the Middle turne their faces one way and march out with their followers beyond one flanker right or left; and turning faces againe seceue vp to the front, and stand euen with the File-leaders. One of these is done, when we desire to enlarge both the wings of the Phalange; the other, when but one wing. Of these two last waies, I haue set downe no figure, because I finde them not expressed in Ælian. Cleandridas the Lacedemonian, vsed yet an other kinde not spoken of by Ælian. Polienus telleth the story thus: n Polien lib. 1. in Cleandridas. 4. Cleandridas making warre vpon the Thuriars, hauing halfe as many men againe, as they, conceiuing if they had intelligence hereof, they would hardly bee brought to fight, imbartrailing his Phalange, stretched it out in depth. The Lucians therefore, contemning the small number, drew out their forces in length, with intent to ouer-front the enemy; which Cleandridas perceiuing, commanded the followers to march vp, and ranke with their Leaders; and by that meanes increased the length of his Phalange, and ouer-fronted the enemy; who being incompassed, and assailed with misseue weapons on all hands perished intirely, excepting a few, that saued themselves by shamefull flight. The words seeme obscure to a man not acquainted with the Tacticks. There are two kinde of soldiers saith Ælian in a file, Leaders, and followers. All the Leaders are the odde of the file; as the first, the 3, the 5, the 7, and so forth: the followers are the euen, as the 2, 4, 6, 8. Those that are in the same ranke, are called side-men. Now, saith Polien, Cleandridas willed the followers to step forward, and to ranke, and become side-men with their Leaders: that is, he willed the euen files to double their ranks with the odde; and so extennated the depth, but increased the length of his Phalange; by which art he ouer-fronted, & inclosed the enemy on all sides. This way then to double ranks, or the length of the battaille, is to insert the euen ranks man by man into the odde. All the Doublings that haue beene rehearsed, were Doublings either in number alone, or else both in number, and place. For doubling of place alone nothing is said in Ælian. The Inferiour I recited, supplyeth this defect: saying, the place is doubled with 124 files, onely by commanding halfe to turne to the Pike, halfe to the Target, till the Phalange be stretched to a convenient length; as from 5 furlongs to ten; which is as much to say in few words, as to open the Phalange; Or to bring it from order; to open order. For so the front possesseth double ground to that it had before.

4 The vse of doubling the length is. Two causes are assigned for the doubling of the length: One to ouerwing the enemy, the other to auoide ouerwinging our selues. Cleandridas in the example aboue, performed both: For he both disappointed the Lucians that sought to incompass him, and besides incompassed, and inclosed them. The narrower the front is, it is the more in danger of ouer-fronting; being drawne out in length it is freer from enclosing, because a greater compass must be fetched before it can be inclosed. Yet are we to take heed, that in doubling of the front, we giue it not so much length that it faile in depth. The want of length, or depth is alike dangerous, and giueth advantage to the enemy. I haue touched before, and quoted Leo glancing onely at his words. Now I will set them downe as they lye. When the thicknes or depth of the Phalange (saith he) is gathered vp and made more thicke, it becometh not so to lengthen it, that it become altogether weake and without depth. For it will so come to passe, that the enemy shall easily cut it in peeces, and make a passage thorough it, and not onely seeke to incompass it before, but passing thorough the middelt, bee found behinde, and there in damage it. And this it behooueth a Generall, not onely to take heede, hee suffer not himselfe, but also indecour to put vpon his enemy.

M 2

Hithert

i Leo cap. 7.  
69.k Polyen lib. 4.  
in Antigonus.  
5. 19.

Hitherto are the words of Leo: *showing the disadvantage of a battaile too much thinned by doubling the length. But<sup>i</sup> Leo elsewhere addeth an other cause of doubling, namely to make shew a faire sight of the Armie. For the more ground is taken in front, the more will the number appeare, and the bravery of every man in particular discovered. Further Antigonus used also this doubling for a policie to beguile his enemy.* k *Polyen reporteth the fact thus: Antigonus incamped against Eumenes with an armie inferior in number. And when messengers were sent often from one to another, Antigonus at the receipt of a messenger of the enemy, commanded one of his souldiers to come running in, as it were out of breath, and all to be fulfilled with dust, and to bring newes that his Confederates were come. Antigonus hearing the newes, leaped for ioy, and sent away the messenger. The next day he led his Armie out of his trench, doubling the length of his front. When the enemy heard of their messenger the newes, that was brought to Antigonus concerning his Confederates, and saw the length of his battaile doubled, they imagined that the depth was answerable to the front. And therefore they dislodged being afraid to ioyne with him.*

5 There are that mislike] *Countermarches, and Elians doublings of number, are dangerous the enemy being ready to charge. Because the files of the Battaille must be kept in open Order till the motions be ended, which posture is not fit to receive the charge of the enemy, as we saw out of the eleventh Chapter. The other two doublings are done in close order, whereof I made mention a little before; The one dividing the middle men in halfe, and steering them up by the battaile on both sides; The other steering them upon one side which you will, may be used without danger, as well when the enemy is neare, as when the fight is: in as much, as they disturbe not the battaile, but aduance fresh aides against the enemy on the flanks of it.*

6 By inserting the second file } *There are two manner of doublings of the depth or of files; one in number, the other in place. In number, when one file is inserted into another, the Leader or first man of the second file standing behind the Leader of the first; the second behind the second, the third behind the third, and so forth of the rest: Or when the euen files countermarch, and their Leaders place themselves behind the Bringers-up of the odde, their files following them; or (which cometh all to one) the files being whole, they divide themselves into two parts in the front, and halfe countermarch, and place themselves in the Reare of the other file to file: albeit the two last are Doublings both in number and place, and not in place alone. The true Doubling of the place alone is not Elian. The Insertion whereof I spake, remedieth this defect also. There it is said, that when 16 men (that is a file) are so extended, that they possesse as much length as 32 should doe, (that is, as 2 files) it is doubling of place, which is nothing else but changing of the Souldiers order into open order. For in their order they haue 48 foote in depth; in their open order 96 foote in depth. In this Doubling of depth we must take heed that we make not the front of our Armie too narrow; lest we give opportunity to the enemy to inuircle, and incompasse it. Polybius noteth this a great fault in Marcus Atilius Regulus, at such time as he fought with the Carthaginians, and was taken prisoner. His words haue this effect: k The Romans seeing the enemy order his battaile marched out against him full of courage. Being notwithstanding somewhat appalled at, and foreseeing the Elephants violence in coming on, they set their Darters before, and placed many maniples of Armed behind, one after another, and diuided the Horse halfe into one wing, halfe into the other. Then making the whole battaile shorter, but deeper, then they were wont, they provided well against the Elephants, but not against the Horse, that farre exceeded theirs*

in

in number. Being now come to hands the Roman horse ouerpressed with multitude of the Carthaginians quickly fled from either wing. But the foote of the left wing, partly auoyding the Elephants, partly concerning the Mercenaries, fell on, and charged the right wing of the Carthaginians, and putting it to flight; followed hard, and gaue chase euen to the trench. But of those, that were placed against the Elephants, the first sinking vnder the violence of the beasts, perished being ouerturned, and troden to death by heapes. The body of the battaile remained a while vnbroken by reason of the depth of them, that were after placed. But when the Reare of all, incompassed by the horse, was forced to turne about, and fight with them; and the other that had by force made way thorough the middle of the Elephants, and were now behind their backs, came vp to the fresh Phalange of the Carthaginians, standing in good order, they were by them slaine. Thus fortune being contrary on all sides, the Romans for the most part were troden to death by the excessive might of the beasts, and the rest died with the darts of the horsemen in the place, where they fought. The error of Atilius Regulus was in ordering his battaile too deepe; by meanes whereof it was easily incompassed, and distressed by the Carthaginian horse. m Appian likewise blameth Antiochus for ordering his Phalange 32 men in depth, where the Macedonian Phalange ought to but 16 deepe, n *showing that by that oversight it was incompassed by the Romans, and overthrowne. I haue touched the historie in my notes before. Many other examples might be alledged, but these two are sufficient for our purpose.*

#### The words of Command in doubling of the length by number.

*Middle men double your Ranks to the right, or left hand.*

*By this Command the middle men with their halfe files march up to the front in the spaces betwixt the files, and stand euen with the File-leaders, and the rest euen with the rest of the Ranks.*

#### Doubling of the length in place.

*Stand in your open order.*

*One halfe openeth their files to the right hand, the other to the left, and stand fix foote one from an other.*

#### Doubling of the depth in number.

*Double your files to the right or left hand.*

*The euen files fall into the spaces of the odde files.*

*Double your files by countermarch to the right or left hand.*

*The euen files countermarch, and fall behind the reare of the odde, and place themselves lineally after them, observing their first distances.*

*Divide your files and double them by countermarch to the right, or left hand.*

*Halfe the files divide themselves from the other halfe, and countermarch out behind the Reare, then turne their faces towards the place behind the Reare of the standing files, which remoued not; then march on, and place themselves orderly behind them, file to file, then turne their faces, as at first.*

#### Doubling the depth in place.

*Ranks open behind to your open order.*

M 3

The

*The broad-fronted Phalange, the deep Phalange, or Herse, and the vncuen-fronted Phalange.*

CHAP. XXX.

**P** *Lagiophalanx*, or the *broad-fronted Phalange*, is that, which hath the length much exceeding the depth.

*Orthiophalanx*, or the *deep Phalange* (commonly called the *Herse*) is that, which proceedeth by *wing* having the depth much exceeding the length. In generall speech every thing is called *Parasickes*, which hath length more then the depth; and that which hath the depth more, then the length, *Orthion*: and so likewise a *Phalange*.

The *Phalange Loxe*, or vncuen fronted, is that, which putteth forth one of the *wings* (which is thought fittest) toward the enemy, and with it beginning the *fight*, holdeth off the other in a convenient distance, till oportunitie bee to advance

*Of Parembolè, Protaxis, Epitaxis, Proflaxis, Eutaxis,  
& Hypotaxis.*

CHAP. XXXI.

**P** *Arembole*, or *insestion* is, when placing souldiers before we take off the hindmost, and ranke them within the distances of the first.

*Protaxis*, or *fore-fronting*, is when we place the *light-armed* before the *front* of the *armed*, and make them *fore-standers*, as the *File-leaders* are.

When we place the light-armed behind, it is called *Epitaxis*, as it were an *after-placing*.

*Proflaxis*, or *adioyning* is, when to both flanks of the battaile, or to one flanke, some part of the hindmost is added, the front of them, that are added, lying euen with the front of the battaile; such addition is called *Proflaxis*.

*Eutaxis*, or *insestion*, is when it seemeth good to set the light-armed within the spaces of the files of the *Phalange* man to man.

*Hypotaxis*, or *Double-winging*, is when you bestow the light-armed vnder the wings of the *Phalange*, placing them in an embowed forme; so that the whole figure resembleth a three-fold gate, or doore.

*How the motions of wheeling, double, and treble wheeling  
of the battaile are to be made.*

CHAP. XXXII.

**I**T followeth to shew how a battaile may be turned or wheeled, and how after reduced to the first posture, or Station.

When therefore wee would accustome our Troupes to wheele the battaile to  
the

the right hand, we command the right-hand-file to stand firme, & the rest of the files to turne their faces to the right hand, and to moue close vp to the right hand file. Then to turne their faces, as they were at first: Then the hinder ranks to close forward: Then the whole battaile in that closeness to wheele about the corner-file-Leader to the right hand. This done, if neede be to reduce it to the first posture, or Station, we command euery man to turne about his face to the Target, or left hand (that is to looke the contrary way) Then to wheele about the body, that is, as it turned, closed, & ferred with the front to the right hand so to returne it againe to the place, from whence it made the wheeling; Then the file-Leaders to stand firme, and the rest to open their ranks behind; Then to turn their faces about, as they stood at first; Then the right-hand-file to stand fast, and the rest turning faces to the left hand to open their files; Then to stand; And lastly to turne their faces againe to the right hand: and so shall euery man haue his first posture.

But in case we desire to wheele to the left hand, we command the left-hand-file to stand still, and all the rest to turne their faces to the left hand, and moue forward close vp to the left hand file; Then to turne their faces as they were; Then to gather vp the hinder ranks; Then to wheele the battaile to the left hand, and stand; and so is it done, that was commanded. But if restitution to the first posture be needfull, we must doe, as we did in returning from the right. For euery man must turne about his face to the Pike; Then the whole battaile wheeling about the left-hand-corner-file-Leader must returne to the place, it had; Then all the file-Leaders stand firme, and turne about their faces, and the rest open their ranks in mouing forward and make Alce; Then the left hand file is to stand firme (for it hath the place it first had) and the rest turning their faces to the right hand to open their files, and moue forward, till they haue recovered their first distances; then to turne their faces as at first; and so shall euery man be in his first posture. Now if we would wheele the battaile about, to the pike we are to make 2 wheelings to the same side, so will it come to passe that the file-Leaders shall in the change haue their faces turned to the Reare, where before they had them looking out from the front. But in restoring to the first posture we command it to wheele about to the right hand; That is, we giue it two wheelings more the same way; So the file-Leaders will haue their faces set, as at first. Then we command the file-Leaders to stand firme, and the rest to open their ranks behind; then to turne their faces about; Then the right hand file to stand still (for it hath the right place) and the rest turning their faces to the right hand to march on, till the former distances are regained; then to make Alce. So is the battaile reduced to the first Station.

If you would haue the battaile turne about to the Target, you are to giue contrarie directions; That is, in stead of commanding a double wheeling to the Pike, to command a double wheeling to the Target; Then by making two turnes the contrary way, to vnderlike changes, we spake of before.

There is likewise a treble wheeling of the battaile, when it turneth thrice to the same hand, namely to the Pike, or Target. The double wheeling to the Pike transferreth the Souldiers face from the front to the backe of the battaile: The treble wheeling to the Pike bringeth his face to the left flank. The treble wheeling to the Target contrariwise to the right flank.

Notes:

## The Tactics

## Notes.

**B**Efore in the 26 Chapter Elian discoursed of wheeling, and the kindes thereof. The manner, how it is to be done, is reserved for this place, I neede not therefore remember any thing else, besides the words of command.

## The words of command in Epistrophe.

*The uttermost file on the right or left hand stand firme  
The rest turne faces (to the side purposed) and march up to the file standing firme.  
Faces as you were.  
Close your ranks forward:  
Wheele the body (to the hand appointed) and when you have your ground, stand.*

## Returning to the first Posture, or Anastrophic.

*Faces to the right or left hand  
Wheele backe the body to the ground, it first had.  
File-Leaders stand firme: the other ranks open to their first place.  
Faces about (to which hand you will)  
The corner file (to which the turning was) stand firme, the rest open to their first ground.  
Faces as you were, and order your Pikes.*

## Petispalmos, or wheeling about.

*In wheeling about, the same wordes to close the files, and ranks, are to be used, which were used in Epistrophe, there remaineth no more, then to say  
Wheele about your body, to the right, or left hand.*

## Anastrophic or returning to the first Posture.

*Returne to your first Posture.*

*The same forme is used, that was held in the former returning unto the first posture for opening ranks and files.*

## Eperispalmos, or treble wheeling.

*In this motion the same course is held, that was in the wheeling; But only that you command a treble wheeling. And the returning to the first Posture, or Anastrophic is all one, but for the same difference.*

*Of closing the battaile to the right, or left hand,  
or to the middle.*

## CHAP. XXXIII.

**I**F we would close, or thicken the Phalange in the right wing, we are to command the right-wing-corner-file to stand still, and the rest turning faces to the Pike to aduance toward the right hand; Then to set their faces as they were, and to gather vp the ranks behinde. In reducing them to the first posture we are to command the file-Leaders to stand, and the rest turning about their faces to open their



their ranks behinde; Then to turne their faces as they were; Then the right-wing, corner-file to stand (for it hath the right place already) and the rest proceeding on to the Target to follow their Leaders, and observing their distances to turne their faces as at first. A contrarie course is to be held in thickning the *Phalange* to the left wing.

If the *Phalange* be to be closed in the midst, the *Diphlange* on the right hand must turne their faces toward the Target, and the *Diphlange* on the left hand their faces toward the Pike; Then move forward toward the midst of the *Phalange*; Then, after their true distance gained, to set their faces, as they were, and to gather up the Ranks behind.

When we would reduce the *Phalange* to the first posture, wee command to turne faces about; then to open the Ranks, and all to move on, but the first Rank; then to turne their faces againe, and the right *Diphlange* turning to the Pike, and the left *Diphlange* to the Target to follow their Leaders, till they have recovered their first distances. Then to set their faces, as they were.

This rule is to be observed in all turnings about of faces, when they are made out of closings, that the Pikes be aduanced, least they hinder the Souldier in making his turning.

The light-armed are to be taught, and exercised after the same manner.

#### Notes.

**I**N the 11 Chapter the distances, that ought to be betwixt souldier and souldier, are particularly treated of. This Chapter sheweth, how they are to be gained, that is, how we are to proceede out of one distance into another. And because the open order is it, that is commonly begunne withall, it is here taught how from thence to passe to the rest, and to returne to it againe. The end of closings is spoken of before. In regard of place they are said to be of two kinde: One to the wing (right or left) the other to the midst of the *Phalange*. I cannot expresse the manner better, then by setting downe the wordes of command, or direction, which are these in

#### Closing to the right wing.

*The right-wing, corner-file stand firme*  
*The rest turne faces to the Pike, and move (according to the distance required) to the right hand.*

*Faces, as you were.*

*Close your hinder ranks forward, and order your Pikes.*

#### Restoring to the first posture.

*File-Leaders stand firme.*

*The other Ranks, turne faces about, and open behinde to the first distance.*

*Faces as you were.*

*The right-wing, corner-file stand firme; the rest turne faces to the Target, and proceede to your first distance.*

*Faces as you were; and order your Pikes.*

#### Closing to the left wing.

*It differeth not from the other, but that the moving is to the contrarie hand.*

Closing

## The Tacticks

Closing to the midst of the Battaille.

*The right wing turne faces to the Target, the left to the Pike.  
Each move up to the midst of the Phalange, and stand at the distance named.  
Faces as you were.  
Close the hinder ranks forward, and order your Pikes.*

Restoring to the first Posture.

*The first ranke stand firme.  
The rest turne faces about, and open the ranks to the first distance.  
Faces as you were.  
The files next the middle section stand fast, and the right wing turne faces to the Target, the left to the Pike, and move on till the first distance recovered.  
Faces as you were, and order the Pikes.  
We may not forget Elians generall rule for turning of faces out of Closings, that the Pikes be alwaies aduanced. For when you come up to the closenesse required, the Pike upon the shoulder will hardly admit turning of the face. The like falleth out when you would open from the Closing.*

*The vse, and aduantage of these exercises  
of armes.*

### CHAP. XXXIV.

**T**Hese precepts of turning about of faces, of wheeling, and double wheeling of the Battaille, and of reducing it to the first posture, are of great vse in suddaine approaches of the enemy, whether hee shew himselfe on the right, or left hand, or in front, or in the reare of our march. The like may bee said of *Countermarches*; Of which, the *Macedonians* are held to bee the inuentors of the *Macedonian*; the *Lacedemonians* of the *Lacedemonian*; and for this cause either to haue name accordingly. The Histories witnesse, that *Philip* (who much enlarged the *Macedonian* kingdome, and ouercame the *Gracians* in battaille at *Cherones*, and made himselfe Generall of *Greece*) and likewise his sonne *Alexander* (that in short time conquered all *Asia*) made small account of the *Macedonian* countermarch, vnlesse necessitie forced it; and that they both by the vse of the *Lacedemonian* became victorious over their enemies. For the *Macedonian* countermarch the enemy falling vpon the reare, is cause of great confusion; in as much as the hindermost dismarching toward the front, and making a shew of running away, it more encourageth, and emboldneth the enemy to follow. For feare, and pursuit of the enemy [ordinarily] accompanieth that kinde of *countermarch*. But the *Lacedemonian* is of contrarie effect. For when the enemy sheweth himselfe in the reare, the Leaders with their followers brauely aduancing, and opposing themselves, it striketh no small feare, and terror into their mindes.

CHAP.

of the signes of direction, that are to be given to the  
armie, and their severall kinde.

## CHAP. XXXV.

WE are to acquaint our forces both foote, and horse, partly with the voice, and partly with visible signes, that whatsoever is fitting be executed, and done, as occasion shall require. Some things also are to be denounced by the Trumpet, for so all directions will be fully accomplished, and sort to a desired effect. The signes therefore, which are delivered by voice, are most evident, and cleere, if they have no impediment. But the most certaine, and least tumultuous, are such, as are presented to the eye, if they bee not obscured. The voice sometime can hardly be heard by reason of the clashing of armour, or trampling, and neighing of Horses, or tumult of cariage, or noyle, and confused sounds of the multitude. The visible signes also become many waies incertain, by thickness of aire, and dust, or raine, or snow, or sun-shine, or else thorow ground, that is vineuen, or full of trees, or of turnings. And sometimes it will not be easie to find out signes for all vses, occasions oftsoones presenting new matter, to the which a man is not accustomed. Yet can it not fall out, that either by voice, or by signal, we should not give certaine and sure direction.

Of marching, and of diuers kinde of Battailles fit for a March: And  
first of the right-induction, of the Cœlembolos, and  
the Triphalange to be opposed against it,

## CHAP. XXXVI.

BEing now to speake of *marshing* I will first giue to vnderstand, that some kind of *marsh* is a *Right-induction*, other some a *Deduction* on the right, or left hand; And that in a *single*, or *double*, or *treble*, or *quadruple-sided-battaile*. In a *single*, when one enemy is feared; In a *double*, when two; In a *treble*, when three; In a *quadruple*, when the enemy purposeth to giue on on all sides. Therefore the *marsh* is vnderaken sometimes in a *single Phalange*, sometimes in a twofold *Phalange*, or else in a threefold *Phalange*, or in a fourefold *Phalange*.

A *right-induction* is, when one body of the same kinde followeth another; as if a *Xenagyl* lead, and the rest follow *Xenagyl*-wise. Or a *Tetrarchy* lead, and the rest follow according to that forme. It is so called, when the *marsh* stretcheth it selfe out into a wing hauing the *Depth* much exceeding the length.

Against it is opposed the \* *Cœlembolos*, which is framed, when the *Antistomos* \* Hollow  
\* *Diphalance* disioyneth the Leading-wings, closing the *Reare* in manner of the Wedge.  
letter V: as the figure after placed doth teach, In which the *front* is disuenered, & Double  
the *reare* ioyned, and knit together.

For the *Right-induction* pointing at the midst of the enemies battaile, the *Cœlembolos* quickly opening before serueth both to frustrate the charge of the *front*, and to clasp in, and circumuent the *flankes* of the *right-induction*.

Further:

\* Treble Phalange.

Furthermore a *\* Triphalange* is to be set against the *Calembolos*, one *Phalange* fighting against one *wing* of the *Calembolos*; The second against the other, and the middle, and third forbearing, and expecting a time fit to charge.

*Of Paragoge, or Deduction.*

CHAP. XXXVII.

*Paragoge*, or *Deduction* is, when the *Phalange* proceedeth in a *wing* not by *file*, but by *ranke*, having the Commanders, or *file-Leaders*, either on the right hand, which is called a *right-hand-Deduction*, or on the left hand, which is called a *left-hand-Deduction*. For the *Phalange* marcheth in a *double*, *treble*, or *quaduple-side* according to the place, and part, it is suspected, the enemy will giue on. And both the *Paragogies* beginning the fight in flanke doe make the length double to the depth. This forme of fight was deuised to teach a Souldier to receiue heedfully the charge of the enemy not onely in front, but also in flanke.

*Of the Phalange Amphistomus.*

CHAP. XXXVIII.

\* Double fronted Phalange.

The *Phalange* *\* Amphistomus* (for it is so called, because it hath two fronts, and that part of the battaile, that is set, and aduanced against the enemy, is called a front) Seeing then in this forme the middlemost are ordered backe to backe, and those in front and *reare* make head against the enemy, the one being Commanders of the front, the other of the reare, therefore it is called *Amphistomus*. It is of great vse against an enemy strong in Horfe, and able to giue a hot, and dangerous charge; and principally practised against those *Barbarians*, that inhabit about the riuier *Ister*, whom they also call *\* Amphippi* because they change Horfes in fight.

\* Horsemen that use two horfes, one spare, the other being ridden upon.

The Horfe battaile to encounter this forme hath a *Tetragonall* shape, being for the purpose diuided into two *broad-squares* (they are *broad-squares*, that haue the front twice as much as the depth) And these *Squares* are opposed seuerally against the diuisions of the foot-battaile.

*Of the Phalange Antistomus.*

CHAP. XXXIX.

\* Double ranked Phalange.

The *Phalange* *\* Antistomus* is like the *Amphistomus* the forme being a little altered; so that it accustometh the souldier to resist the seuerall kinds of incursions of Horfe. All that hath bene spoken concerning the former *Phalange* both for foot, and Horfe agreeth with this figure also. Herein they differ, that the

the *Amphistomus* receiue the charge in front, and reare, the *Antistomus* in flanke. But aswell in the one, as the other, they fight with long Pikes, as doe the *Alans*, and *Sauomatans*. And the one halfe of the souldiers in the files turne their faces forward, the other halfe backward; so that they stand back to backe. This forme hath two fronts, the one before, where the file-Leaders, the other behind, where the *back-Commanders* stand. And being also diuided into a *Diphalange* it maketh the fore-front with the one, and the alter-front with the other *Phalange*.

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Of the *Diphalange Antistomus*.

CHAP. XL.

**A** *Diphalange Antistomus* is that, which hath the file-Leaders placed not in *Deduction* outwardly, but inwardly face to face one against another; and the reare-Commanders without, one halfe in a right, the other in a left-hand *Deduction*.

This forme is vsed when the Horse giue on and charge *Wedge*-wise. For the *\*Wedge* shooting forth into a point, and hauing the Commanders following in flanke, and endeavouring to disseuer, and breake the front of the foote, the Leaders of the foote, foreseeing their purpose, place themselves in the midst with intent either to repulse them, or else to giue them a thorough passage without losse. For the *Wedge* flieth vpon the foote in hope to charge the multitude in the midst, and to disorder the whole battaile: And the foote Commanders conceiuing well the fury of that kinde of forme; leaue a little space betwixt either front, and stand like walles on both sides, and jointly turning their faces toward the midst, giue them a fruitlesse, and empty passage.

This forme of Horse-battaile is called a *Wedge* by *Talicks*, which was inuented by Philip King of *Macedon*, who placed his best men before, that by them the weaker sort might be held in, and enabled to the charge: as we see in a speare, or in a sword, the point whereof by reason of the sharpnesse quickly piercing maketh way for, and letteth in the middle blunt iron:

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Of the *Diphalange* called *Peristomus*.

CHAP. XLI.

**T**he *Phalange* of the *Diphalange \*Peristomus* proceedeth by *deduction* in a wing; the oblique *deduction* on the right hand hauing the file-Leaders without, the left hand oblique *deduction* the reare-Commanders within. The figure sheweth the intent of them that fight so ordered. For the battaile going to charge; hauing bene at first *Tetragonall*, diuideth it selfe into two oblique-wings (the right; and the left) of purpose to enclose the aduerser *square-battaile*. And they fearing to bee inclosed transforme themselves into two severall marching-*Phalanges* directing one against the right, the other against the left wing. Therefore it is called *Peristomus*, as hauing the front bent against the enemy both waies.

Of the *Diphalange* called *Homoioistomus*, and  
of the *Plinthium*.

## CHAP. XLII.

\* A double life-  
franted *Dipha-*  
*lange*.

A *Diphalange* \* *Homoioistomus* is so named because a whole file (that is 16 men) moving by it selfe, another file followeth it. And it is therefore called *Homoioistomus*, because they that follow, follow in a like figure.

\* A four-sided  
battaile square  
of men and  
ground.

This kinde is opposed against the *Plinthium*. \* *Plinthium* is a forme of Battaile, that hath the sides equall both in figure and number. In figure because the distances are every where equall; In number because there are as many men in length, as in depth. In this *four-sided-Battaile* are none in the flanks, but armed, without Archer, or Slinger to helpe. When therefore two *Phalanges* march together, one by another, and both haue their Leaders either in a right-hand, or left-hand *Deduction* it is called a *Diphalange Homoioistomus*.

Of the *Diphalange Heterostomus*.

## CHAP. XLIII.

\* A double *Pha-*  
*lange* with con-  
trary flanks.

A *Diphalange* \* *Heterostomus* is that, which proceedeth by *Deduction*, hauing the Leaders of the former *Phalange* in a *right-hand-Deduction*, and of the following *Phalange* in a *left-hand-Deduction*: so that the battailes march counter-changeably, one hauing the Leaders in one flanke, and the other in the other: and so the rest.

Again of the Battailes called a *Rhombe*, and of the  
*foote-halfe moone* to encounter it.

## CHAP. XLIV.

THE battaile framed in forme of a *Rhombe*, was first inuented by *Ileon* the *Thessalian*, and was called *Ile* after his name; and to this forme he exercised and accustomed the *Thessalians*. It is of good vse, in that it hath a Leader at euery corner, at the point the Captaine, of the Troupe, thereare-Commander behinde, and on either side the flanke-commanders. The foote battaile, fittest to affront this, is the *Menoides*, or *Cressant*, hauing both the wings stretched out, and in them the Leaders, and the middest imbowed to inuiron and wrap in the Horsemen in their giuing on. Whereupon the Horsemen ply the foot a farre off with flying weapons, after the manner of the *Tarentines*, seeking thereby to dissolue, and disorder their circled frame of marching. *Tarentum* is a City of *Italy*, the Horsemen whereof are called *Acroboliti*, because in charging they first cast little *Darts*, and after come to hands with the enemy.

of

Of the Horse-battaile Heteromekes, and of the  
Plagiophalange to be opposed against it.

## CHAP. XLV.

**T**He Horse battaile \* *Heteromekes* is that, which hath the *depth* double to the *length*. It is profitable in many respects. For seeming to cary but few in so small a bredth it deceiveth the enemy, and it easily breaketh his forces with the thicknesse, and strength of the embarrailing, and may without perceiuing, bee lead thorough straight, and narrow passages.

The Foot-battaile to encounter it is called the *Plagiophalange*, or *broad-fronted Battaile*. For being but slender in *depth* it beareth forth and extendeth it selfe in *length*; so that, albeit it be broken in the midst with the charge of the Horse; yet is nothing broken, but a little of the *depth*; and the fury of the Horse is carried not vpon the multitude of the foote; but straight, and immediately, into the open field. And for that cause is the *length* thereof much exceeding the *depth*.

Of another kinde of Rhombe for Horsemen, and of the  
foote-Battaile Epicampios Emprosthia to  
encounter it.

## CHAP. XLVI.

**A**Nother sort of *Rhomboides* there is, whereof I need say no more, but that it fileth, and ranketh not. For I haue before shewed the vse, and that *Ileon the Thessalian* was the inuentor, and that *Iason Medea's* husband most put it in practise. The vse thereof is great being directed, and lead, in the foure corners by the *Captaine*, the *Lieutenant*, and the two flanke-Commanders. It is commonly fashioned of Archers on Horsebacke, as the *Armenian*, and *Persian* manner is.

Against it is opposed the foote-battaile called \* *Epicampios Emprosthia*, because the *circumduction of the front* is like an embowing. The end of this forme is to deceive and ouer-reach the Archers on Horsebacke either by wrapping them in the void space of the front, as they charge, and giue on vpon the spurre, or else disordering them first with their wings, and breaking their fury, by overthrowing them finally with their ranks about the middle *Ensignes*. This kinde of Battaile was deuised to entrappe and beguile. For opening the middle hollownesse it maketh shew but of a few, that march in the *wings*, hauing notwithstanding thrice as many following, and seconding, in the reare. So that, if the *wings* bee of power sufficient for the encounter, there needeth no more; if not, retiring easily on either side, they are to ioyne themselves to the bulke of the Battaile.

*Of the foot-battaile called Cyrtæ, which is to be set  
against the Epicampios.*

CHAP. XLVII.

\* The comaxe-  
battaile.

THE Battaile to be opposed against the *Epicampios* is called \* *Cyrtæ* of the circumferent forme. This also maketh semblance of small forces by reason of the conuexitie of the figure. For all round things appeare little in compasse; and yet stretched out in length, and singled, they proue twice as much, as they appeared to be: as is euident in pillars, which are round; and therefore in fight shew the one halfe, and conceale the other.

The greatest piece of skill in embattailing, is to make a shew of few men to the enemy, and indeed to bring twice as many to fight.

*Of the Tetragonall Horse-battaile and of the wedge  
of foote to be opposed against it.*

CHAP. XLVIII.

\* Four-square.

THE \* *Tetragonall Horsebattaile* is square in figure, but not in number of men. For in *Squares* the number is not alwaies the same: and the Generall for his aduantage may double the *length* to the *depth*. The *Persians*, *Sicilians*, and most of the *Grecians* doe affect this forme, and take it to bee easie in framing, and better in vse.

\* Wedge.

Against it is opposed the *Phalange* called \* *Embolos*, or *Wedge* of foote, all the sides consisting of armed men. This kinde is borrowed of the Horse-mans *wedge*. And yet in the Horse-wedge, one sufficeth to lead in front, where the Foote-wedge must haue three, one being vnable to beare the sway of the encounter. So *Eparinondas* the *Theban* fighting with the *Lacedemonians* at *Mantineæ*, overthrew a mightie power of theirs by casting his armie into a *Wedge*. It is fashioned if the *Anistomus* *Diphalangy* in marching ioyn the front of the *wings* together, holding them open behind like vnto the letter  $\Delta$ .

*Of the foot-Battaile called Ploceum, and of the win-  
ding, or saw-fronted foot-battaile to  
encounter it.*

CHAP. XLIX.

THE Battaile *Ploceum* hath the *length* much exceeding the *depth*. And it is called *Ploceum*, when armed foote are placed on all sides, the Archers, and Slingers, being throwne into the middest. Against this kinde of Battaile is set the *winding-fronted-battaile*, to the end that with the vnequall figure, they may traine



traîne out those of the *Plasium* to cope with the foremost of the *winding-fronted-bataile*, and by that meanes dissolue, and disorder the thickest of the same. And the file-Leaders of the *winding-bataile* are to obserue, and marke the file-Leaders of the *Plasium*, that if they still maintaine their closenesse, and fight ferred, they also incounter them in the like forme; if the *Plasium* file-Leaders seuer themselves, and spring out from their maine force, then they likewise bee ready, to meet them man to man.

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*Of Hyperphalanges, and Hyperkeras, and  
of Attenuation.*

CHAP. L.

**H**yperphalanges, or *ouer-fronting* is, when both *wings* of the *Phalange* ouer-reach the enemies front. *Hyperkeras*, or *ouerwinging* is, when with one of the *wings* we ouer-reach the front of the enemy. So that hee, that *ouerfronteth*, *ouerwingeth*, but hee, that *ouerwingeth*, *ouerfronteth* not. For they, that match nor the enemy in multitude, may yet *ouerwing* them.

*Attenuation* or lessening is, when the depth of the *bataile* is gathered vp, and in stead of 16 men a smaller number is set.

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*Of conueying the Carriage of the Army.*

CHAP. LI.

**T**he leading of the *carriage*, if any thing else, is of great importance, and requireth a speciall Commander. It may bee conueyed in fūe manners, either before the *Armie*, or behinde, or on the one flanke, or the other, or in the midst.

Before the *Army*, when you feare to bee charged behind. Behind the *Army*, when you would leade toward the enemy. When you feare to bee charged in flanke on the contrary side. In the midst, when a *hollow-Bataile* is needfull and fit.

---

*Of the words of Command, and certaine obser-  
uations about them.*

CHAP. LII.

**A**ll of all wee will briefly repeate the words of direction, if we admonish, first that they ought to be shon, then that they ought to be without *double-signification*. For the *Souldiers*, that in hast receiue direction, had neede to take heede of doubtfull words, least one doe one thing, and another the contrarie. As for the

purpose: If I say *turne your face*, some it may be, that heare mee, will turne to the right, some to the left hand, and so no small confusion follow. Seeing therefore these words *turne your face* import a generall signification, and comprehend *turning to the right, or left hand*, we ought in stead of saying *turne your face to the pike*, to pronounce it thus: *To your Pike turne your face*, that is, we ought to set the particular before, and then inferre the generall. Like reason is, if you say, *turne about your face*, or *countermarch*. For these are also generall words; And therefore wee should do well to set the particular before. As to the *Pike turne your face about*, or to the *Target turne your face about*. Likewise the *Lacedemonian countermarch*, not the *Counter march Lacedemonian*. For if you place the word *Countermarch* first, some of the Souldiers will happily fall to one kind, other to another kinde of *Countermarch*. For which cause words of double sense are to be avoided, and the speciall to be set before the generall.

*Of silence to be used by Souldiers.*

CHAP. LIII.

**B**Ut above all things silence is to bee commanded, and that heed be given to directions: As *Homere* specially signifieth in his descriptions of the *Graecian* and *Troian* fights.

*The skilfull Chief-taines pressed on, guiding with careful eie  
Their Armed troupes, who followed their Leaders silently.  
You surely would have deem'd, each one of all that mighty throng  
Had been bereft of speech, so bridled by his heedfull tongue,  
Fearing the dread Commanders checke, and awfull best's among.  
Thus march't the Greekes in silence, breasting flames of high desire,  
And fervent zeale, to backe their friends, on foes to wreake their ire.*

As for the disorder of the *Barbarians* he resembleth it to birdes saying.

*As shoales of fowle, geese, cranes, and swannes with necks far stretched out,  
Which in the stony fennes Caisters winding streames about  
Shave here, and there, the liquid skie, sporting on wanton wing.  
Then fall to ground with clanging noise, the fennes all over ring:  
None otherwise the Troians fill the field with heaped sounds  
Of broken, and confused cries, each where tumult abounds.*

And againe:

*The Captaine: marshall out their Troupes ranged in goodly guise;  
And forth the Troians pace like birds, which lade the aire with cries.  
Not so the Greekes, whose silence breasted flames of high desire,  
Fervent in zeale to back their friends, on foes to wreake their ire.*

CHAP.

*The words of Command.*

CHAP. LIIII.

Thus then are we to command.

**T**O your Armes.  
Stand by your Armes.  
Carriage away from the battaile.  
Marke your directions.  
Seperate your selues.  
Advance your Pikes.  
File and ranke your selues.  
Looke to your Leader.  
Reare Commander order your file.  
a Keepe your first distances.  
b Faces to the Pike, moue a little further, stand so, as you were.  
b Faces to the Target, moue a little further, stand so.  
b Faces about to the Pike, moue a little further, stand so.  
c Double your Depth. To your first posture.  
c Double your Length. To your first posture.  
d The *Lacedemonian countermarch*. To your first posture.  
d The *Macedonian countermarch*. To your first posture.  
d The *Chorasan countermarch*. To your first posture.  
e Battaile wheele to the Pike. To your first posture.  
e Battaile wheele about to the Pike. To your first posture.

a Before cap. 118

b Before cap. 15.

c Before cap. 29.

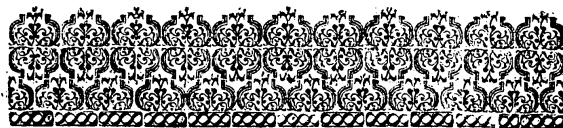
d Before cap. 28.

e Before cap. 26.

These precepts of the Art *Tacticke* (most invincible *Cesar*) I have laide out to your Ma<sup>tie</sup>, which will be a meanes of safety to such, as shall use them, and of the ouerthrow of their enemies.

N 4

The



# THE EXERCISE OF THE ENGLISH IN

the seruice of the high and mighty Lords,  
the LORDS the ESTATES of the vni-  
ted PROVINCES in the Low  
COUNTRIES.



HE Soldiers are diuided into two kindes, *Foote* and *Horse*. The *Foote* againe are of two kindes; *Pikemen* and *Musketiers*.

*Pikemen* are armed with a head-peece, a Curace and Tases defensiu, and with a Pike of fiftene foote long, and a Rapier offensiu. The Armour is all yron; the Pike of Ashen wood for the Steale, and at the vpper end an yron head of about a handfull long with cheekes about the length of two foote, and at the butt-end a round strong socket of yron ending in a pike, that is blunt, yet sharpe enough to fixe to the ground. The forme thereof is expresse in the grauen figure.

The *Musketier* hath a head-peece for defence, a *Musket*, the barrill of the length of 4 foote, the bore of 12 bullets to the pound; a Banelier, to which are fastned a convenient number of charges for powder (sometimes as many as 15 or 16) a leather bagge for bullets, with a pruning yron; a Rest for the *Musket* with an yron forke on the vpper end to support it in discharging, and a pike on the nether end to sticke into the ground; lastly, a Rapier. The figure of this armour also is here inserted.

These soldiours, both Pike-men, and Musketiers, are diuided into Companies; and euery Company consisteth, halfe of Pikes, halfe Musketiers. The Companies are some more in number, some lesse. Some reach to 300 men, some 200, some 100, some 90, some 80, some 70. Euery Company hath these officers of the field: A Capitaine, a Lieutenant, an Ensigne, 2 Serieants, 3 Corporalls, two Drommes; and for other vses a Clerke, a Surgion, and a Prouost.

Companies are compacted into Regiments; and the Regiments commanded by Coronells. Regiments containe not alwaies a like number of Companies, some hauing 10, some 11, 12, 13, 14, 15, some 20 Companies and aboue. In euery Regiment are a Coronell, a Lieutenent Coronell, a Serieant Maior, all officers of the field; a Quarter-master, and a Prouost-martiall for other employments. It shall not be greatly to the purpose to mention higher officers, then Coronells, my principall intent being no other, then to set downe the armes and exercise of our Nation in the said vnitied Provinces. Their armes are spoken of. Their exercise followes.

The

First both Pikes and Muskets are ordered into files of 10 deepe. The Muskettiers are sometime placed before, sometime in flanke, sometimes in the reare of the pikes.

To exercise the motions, there are two distances to be obserued.

The first is when euery one is distant from his fellow 6 foote square, that is in file and ranke 6.

The second is when euery Souldier is 3 foote distant one from the other aswell in file, as in Ranke.

And because the measure of such distances cannot be taken so iustly by the eye, the distance of 6 foot betwixt the files is measured, when the Souldiers stretching out their armes doe touch one an others hands: and betwixt the Ranks, when the ends of their pikes come well nigh to the heeles of them, that march before. And the measure of 3 foote betwixt the files is, when their elbowes touch one another; betwixt the ranks, when they come to touch the ends of one anothers Rapiers.

For to march in the field, the distance of 3 foote from file to file is kept, and of 6 foote from Ranke to Ranke.

To order themselves in Battaille, as also to goe towards the enemy, the distance of 3 foote in file, and ranke, is obserued; and likewise to conuersion or wheeling.

The Musquetters also going for to shoote by Ranks keep the same distance of 3 foot, but going to skirmish they goe *ala Disbandade*, which is out of order.

There is yet another sort of distance, which is not vsed, but for to receiue the enemy with a firme stand, and serueth for the pikes onely (for the Musquetters cannot be so close in files, because they must haue their Armes at liberty) & that is, when euery one is distant from file to file a foote and a halfe, and 3 foote from Ranke to Ranke. And this last distance is thus commanded, *Clofe your selves thoroughly*. But it is not to be taught the Souldiers, for that, when necessitie shall require it, they will close themselves but too much, of their owne accord without command.

To begin therefore to doe the exercises, the Company is set in the first distance, to wit of 6 foote in file, and ranke, and thus is said

Stand right in your files.

Stand right in your ranks.

Silence.

*These are the generall words of Command which are often to be vsed.*

To the right hand.

As you were.

To the left hand.

As you were.

To the right hand about.

To the left hand as you were.

To the left hand about.

To the right hand as you were.

*You must note, that when they are commanded to be as they were, they must returne thither, from whence they parted; and if they turned to the right hand, they must returne to the left, and so in countermarch.*

To

To the right double your ranks.  
Ranks as you were.

To the left hand double your ranks.  
Ranks as you were.

To the right hand double your files.  
Files as you were.

To the left hand double your files.  
Files as you were.

With halfe files to the right hand double your Ranks.  
Halfe files as you were.

With halfe files to the left hand double your Ranks.  
Halfe files as you were.

Files to the right hand countermarch.  
Files to the left hand countermarch.

To the right hand or left at discretion as you were.

Ranks to the right hand countermarch.  
Ranks to the left hand countermarch.

To the right or left hand as you were.

Clofe your Files } to 3 foote distance.  
Clofe your Ranks }

*Understand that in Closing from the outsidest to the middle the Soldier is to stand in his distance of 3 foote in file, and not closer.*

To the right hand wheele.

To the left hand wheele.

Open your Ranks backwards in your double distance to wit at 12 foote, and this for a single Company.

Ranks as you were, &c. at the first.

In opening Ranks or Files, you must keepe them closed vntill the second Ranke or File beginning from the outsidest haue taken their distances, and so shall the rest remaine close vntill euery Ranke or File haue taken their distances in order.

Open your files, to wit to the first distance of 6 foote.

If you will command to clofe files to the right hand or left hand, the outmost file standeth still, and the rest clofe to that file.

*For the Pike with a firme stand.*

Advance your Pikes.  
Order your Pikes.  
Slope your Pikes.

Charge

Charge your Pikes.  
Order your Pikes.  
Traile your Pikes.  
Cheecke your Pikes.

*More for the Pikes first with a firme stand and then marching.*

Charge your Pikes.  
Slope your Pikes.  
To the right hand charge your Pikes.  
Slope your Pikes.  
To the left hand charge your Pikes.  
Slope your Pikes.  
Charge your Pikes to the Reare.  
Slope your Pikes.  
Order your Pikes.

*This must be obserued charging your Pikes with a firme stand to set the right foote behind, and charging the Pikes marching to set the left foote before.*

*For the Musquet.*

**T**He Postures in his Excellencies Booke are to be obserued; but in exercising you must onely vse these three termes of direction.

*Make ready.*

*Present.*

*Giue fire.*

Your Musquetiers must obserue in all their motions to turne to the right hand, and that they carry the mouth of their peece high, aswell when they are shouldred, as in pruning, and also when they hold their pannes garded, and come vp to giue fire.

*The enemy before the Vanguard.* In advancing towards an Enemy, when they doe not skirmish loose and disbanded, they must giue fire by Rankes after this manner.

*Advancing.* Two Rankes must alwaies make ready together, and aduance ten paces forward before the body, at which distance, a Sergeant (or when the body is great some other officer) must stand, to whom the Musquetiers are to come vp before they present, and giue fire, first the first ranke. And whilst the first giues fire, the second Ranke keepe their Musquets close to their Rests, and their pannes garded, and assoone, as the first are fallen away, the second presently present, and giue fire, and fall after them.

Now assoone as the first two Rankes doe moue from their places in the front: The two Rankes next them must vnshoulder their Musquets, and make ready, so as they may aduance forward ten paces as before assoone as euer the two first rankes are fallen away; and are to doe in all points as the former. And all the other Rankes through the whole diuision must doe the same by twos, one after another.

*A MANNER*

*A manner there is to giue fire retyring from an Enemy, which is performed after this sort.*

As the Troope marcheth the hindermost ranke of all keeping still with the Troope is to make ready, and being ready, the souldiers in that ranke turne altogether to the right hand and giue fire, marching presently away a good round pace to the front, and there place themselves in ranke together iust before the front: As soone as the first ranke turne to giue fire, the ranke next makes ready, and doth as the former, and so the rest. *The enemy in the Rear.*

We giue fire by the flanks thus. The vppermost file next the Enemy must be commanded to make ready, keeping still along with the body, till such time, as they be ready, and then they turne to the right, or left hand (according to the sight of their enemies either vpon the right, or left flanke) and giue fire altogether. When they haue discharged they stirre not, but keepe their ground, and charge their Peeces againe in the same place, they stand. Now as soone as the foresaid file doth turne to giue fire, the vitermost next it makes ready alwaies keeping along with the Troope till the *Bringer-up* be past a little beyond the Leader of that file, that gaue fire last; and then the whole file must turne, and giue fire, and doe in all points as the first did, and so the rest one after the other. A *Sergeant*, or if the Troope be great some other better qualified Officer must stand at the head of the first file, and as soone as the second file hath giuen fire, and hath charged, he is to lead forward the first file vp to the second file, and so to the rest one after another, till he hath gathered vp againe the whole wing, and then he is to ioine them againe in equall front with the pikes. *The enemy in flanke.*

Last of all the Troope or whole wing of Musquetiers makes ready altogether, and the first ranke without advancing giues fire in the place they stand in, and speedily, as may be, yet orderly falls away, all the ranks doing the same successively one after another. *The enemy in front. without advancing.*

Thus much of the armes and exercise of the foote.  
The horse ensue.

*The order and discipline holden in Horse-troopes, or in the Cavalry.*

**T**HE Cavalry hath for his Cheife the Generall, the Lieutenant Generall, and the Comissary generall.

To the Cavalry there is a Quarter-master generall, and a Prouost generall belonging; the Iustice resorteth to the Councell generall of warre of the Army.

The Cavalry is of two sorts. *Harquebusers*, and *Curassiers*.

The first haue for defensue armes, the *Curace* pistoll prooffe, and a light head-piece. For offensue the *Carbine* of 3 foote, 3 inches length, and the bore of 20 bullets in the pound, and *Pistolls* like vnto the *Curassiers*.

The *Curassiers* haue for defensue Armes a compleat armour, the *Curace* pistoll prooffe. For offensue two pistolls hauing the barrell of 26 inches in length, and the bore of 36 bullets in the pound. See the figure of Armes.

For the order in Regiments the 40 Companies entertained by the States doe make eleven Regiments.

The Regiment of the Generall hath alwaies the Vantgard, the others alternately

natiuely and by turnes, and he that hath it this day, the next day after hath the Reare, the rest following in the same sort.

Those which command the Regiments are called *Coronells*. The Regiments are compounded of 3, or 4 Companies (of 3 at the least) and the Coronells Company marcheth alwaies on the left wing of the Regiment.

The Capitaines receiue orders from their Coronells, as these from the Commissary Generall.

All the Companies are diuided in 3 equall parts, which are called Squadrons, and distributed to the three chiefe officers; Capitaine, Cornett, and Lieutenant, hauing each of them adioyned an old Souldier, which they doe know to bee of more desert, called a Corporall.

Marching in the field, every Officer marcheth at the head of his Squadron, the Lieutenant excepted, which marcheth behind with the Quartermaster; and the third Corporall at the head of the Lieutenants Squadron.

The Companies are diuided by files, and rankes, the file 5 deepe, and no more, how strong soeuer the Company be.

They obserue that in marching in battaile they must be close together, and to doe the *Motions* there must be 6 foote distance from one Horseman to another.

The Companies being in battaile, there must be 25 paces distance left between every Company, and 50 betwixt every Regiment at the least.

#### *The exercise of Armes for the Cavalry.*

To open the Squadron you must first open the rankes and after the files.

To close the Squadron, you must first close the files, and after the rankes.

There be two sorts of distances betwixt the files; the one close, and the other open.

In the Close there must be no distance or interualls betwixt the files, to the open there must be 6 foote betwixt every file.

Likewise there must be two sorts of distances betwixt the rankes; the Close, which must be without interuall or streete; and the Open, which must be six foote distance.

In a march it must be vnderstood, that the rankes must neuer be more opened, then the open distance of 6 foote.

And to the end that the Troope may march in good order, and obserue well their distance betwixt the rankes, without that the last may be forced to runne or goe to fast, there must be heed taken, that so soone, as the first rankes begin to march, all the Troope, and the Reare also at one time march.

#### *The words of Command are*

Open your Rankes.

Open your files.

Stand right in your rankes.

Stand right in your files.

To the right hand.

As you were.

To

To the left hand.

As you were.

To the right hand about.

To the left hand as you were.

To the left hand about.

To the right hand as you were.

Files to the right hand countermarch.

Files to the left hand countermarch.

To the right or left hand as you were.

Rankes to the right hand countermarch.

Rankes to the left hand countermarch.

Close your files.

Close your rankes.

To the right hand wheele.

To the left hand wheele.



Rankes

*Faults escaped in the Booke.*

Pag. 2. in the margin beneath, for *Spartium* read *Spartanum*. Pag. 9. lin. 20. for *was*, were. & lin. 31. for *Mir-  
canna*, *Bircenna*; and in the marg. lin. 40. for *Dipnosph*, *Dipnosph*. pag. 10. lin. 26. in marg. for *Adrian*, *Arrian*.  
p. 14. l. 1. in marg. for *Dipnosph*, *Dipnosph*. p. 15. l. 18. for *Maffiliani*, *Maffiliani*. p. 17. l. 47. for *plumes*, *Plumes*.  
p. 18. l. 49. for *conceded by*, *concededly*. p. 20. l. 45. for *Thores*, *Thores*. lin. 48. dele *full*. p. 21. l. 1. for *Thofe*, *Thofe*.  
l. 11. for *Othanes*, *Othanes*. l. 32. dele *Then*. p. 23. l. 12. for *Divarati*, *Divarati*. p. 27. l. 1. for *imitation*, *imitation*. p. 28.  
l. 11. for *Θυλων*, *Θυλων*. l. 17. dele *That*. p. 29. l. 4. for *quies*, *quies*. l. 25. *finger*, *finger*. p. 30. l. 35. in marg.  
*Analest*. *Analest*. p. 31. l. 13. put in, *it*. p. 32. l. 29. & 33. for *bedy*, *bedy*. p. 33. l. 35. & 41. for *Sutidai*, *Sutidai*.  
p. 34. l. 3. for *forcible*, *forcible*. l. 19. *Thore*, *Thore*. p. 39. *unfailable*, *unfailable*. l. 43. dele *once*, & for all p. 35. l. 42. *redult*,  
*redult*. p. 36. l. 40. in marg. *debut*, *debut*. p. 39. l. 17. *strok*, *strok*. p. 44. l. 12. in marg. *Encomit*, *Encomit*. 24. *En-  
moerthos*, *Enmoerthos*. 31. 32. *Proceft*, *Proceft*. lin. 47. after *Pavium*, a full point. p. 49. l. 27. *Bahera*, *Bahera*.  
40. *lipifus*, *lipifus*. p. 50. l. 14. after *fuperted*, a full point. 34. *ceftly*, *ceftly*. p. 53. l. 6. *Pratanu*, *Pratanu*. pag. 55.  
l. 3. for *haug*, *giving*. pag. 56. l. 18. *ure*, *ure*. lin. 32. 37. *Anftant*, *Anftant*. 41. *Ther*, *Ther*. 46. a full point after  
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FINIS.

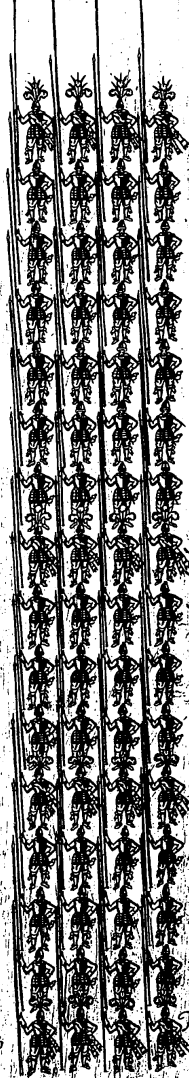
1 File



2 Files Joyned



4 Files Joyned



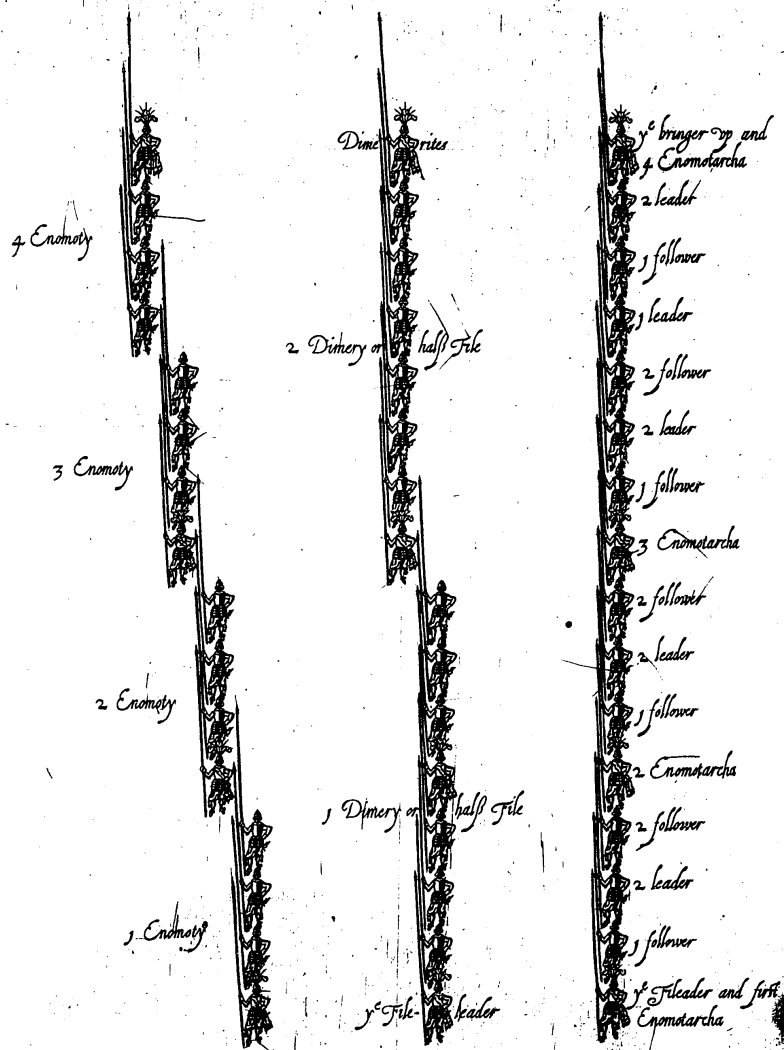
The rank of  
one to

The Front

The flank

File leaders being yelmen  
another

Cap. 5  
The ordering of a File



Joining of Files

1 File



2 Files Joyned



4 Files Joyned



The rank of  
7 one to

The Front

The flank

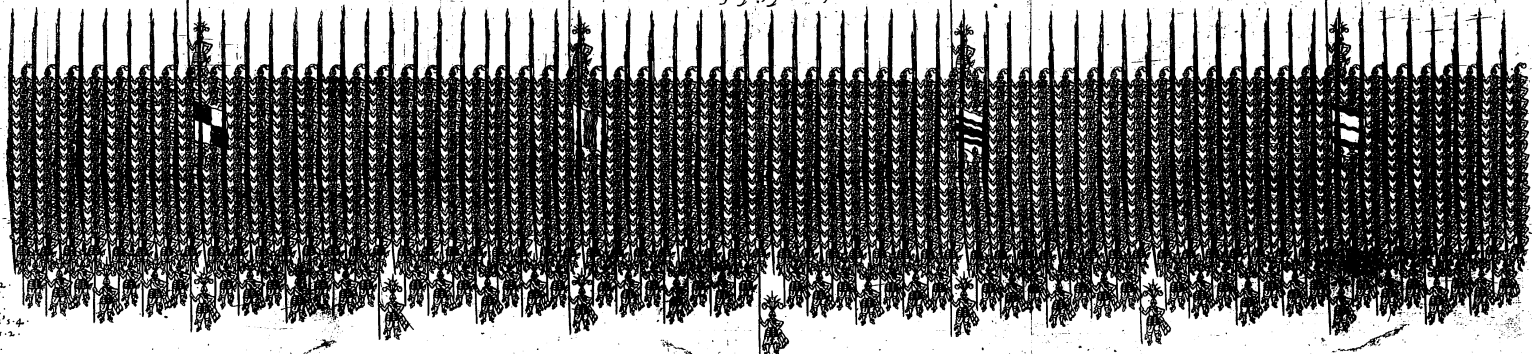
File leaders being yomen  
another





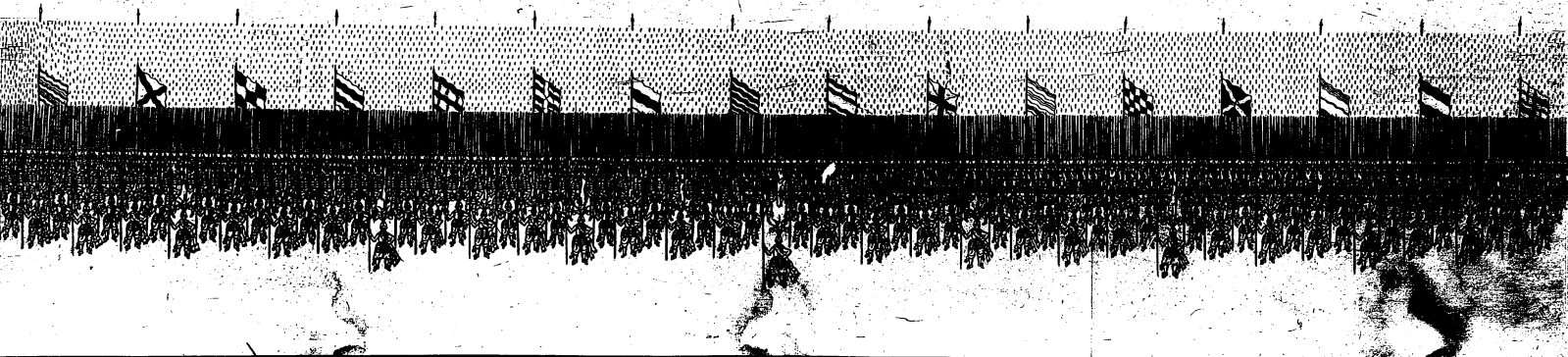
Cap. 9  
*A Chierarchy of 84 files 1024 men*

Diochites . 32.  
 Tetraarch's . 16.  
 Hexaarch's . 8.  
 Ensignatarch's . 4.  
 Pentecostarch's . 2.  
 Chitarch's . 1.



Cap. 9

A Phalanx of 256 files 4096 men



*Cdp. 9.*  
*The Rear*

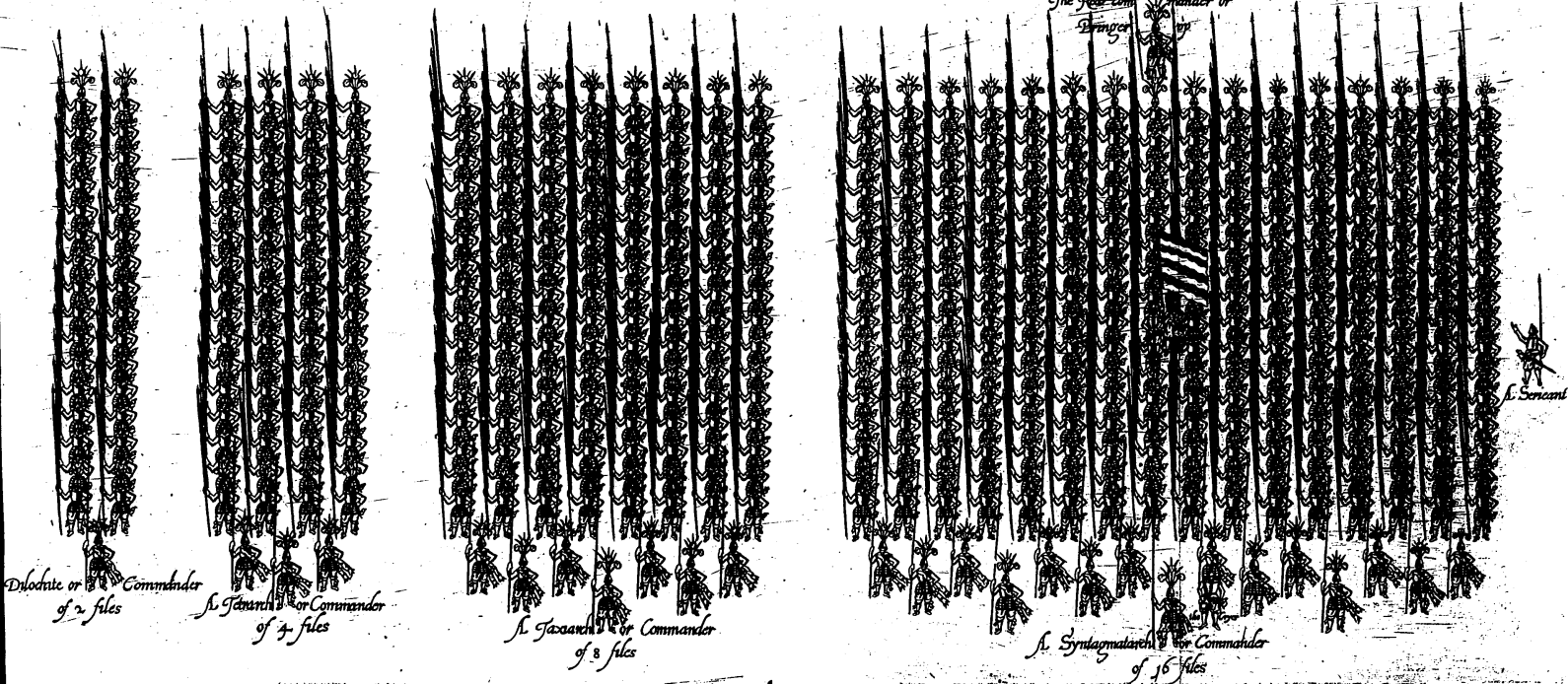
*S. Dilochy of*  
*2 files 32 men*

*S. Tetrarchy of*  
*4 files 64 men*

*S. Taxis of*  
*8 files 128 men*

*S. Syntagma of*  
*16 files 256 men*

*The Rear commander or*  
*Drum*



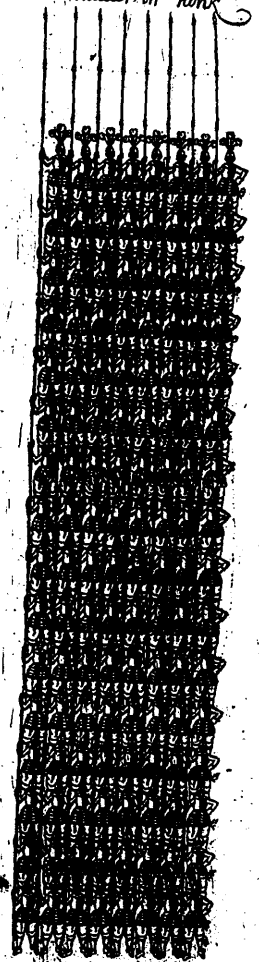
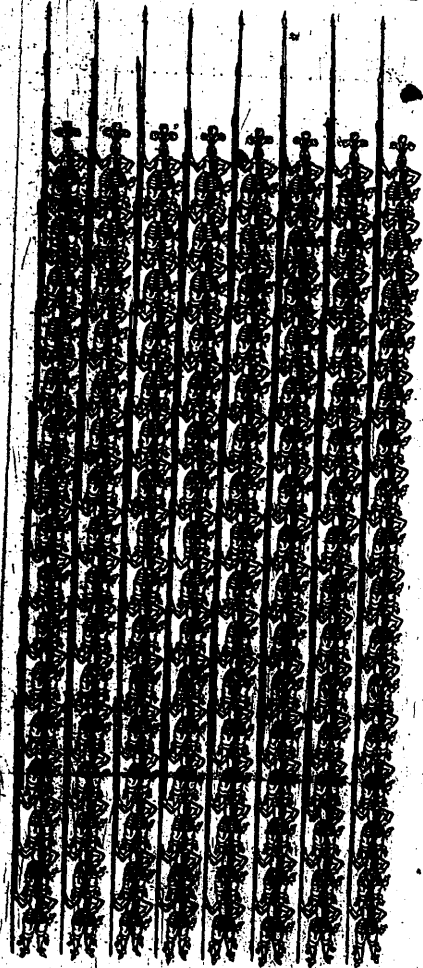
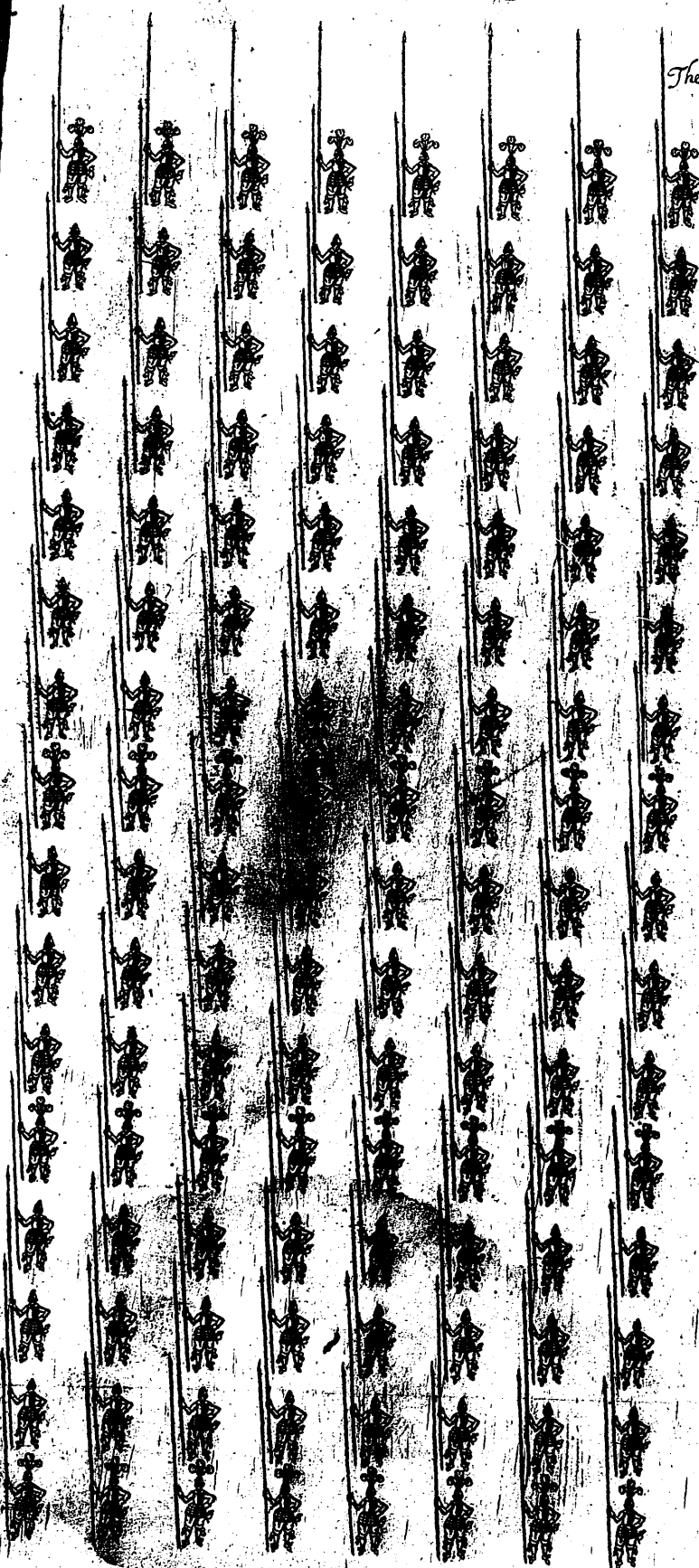
The first distance ordinary & pace  
in file as much in rank

The Rear

The second distance called Closing  
& pace in file as much in rank

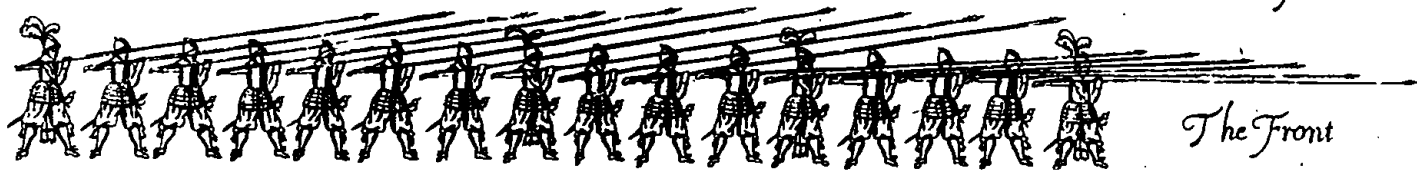
The third distance called Shuttin  
or setting & pace in file Shoulder  
to Shoulder in rank

The Front



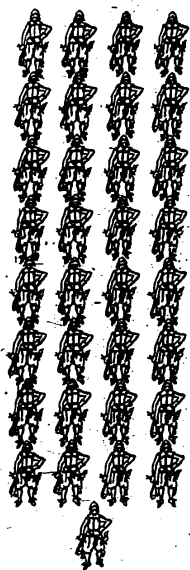
Cap. 14.

Pikes reaching  
over the Front

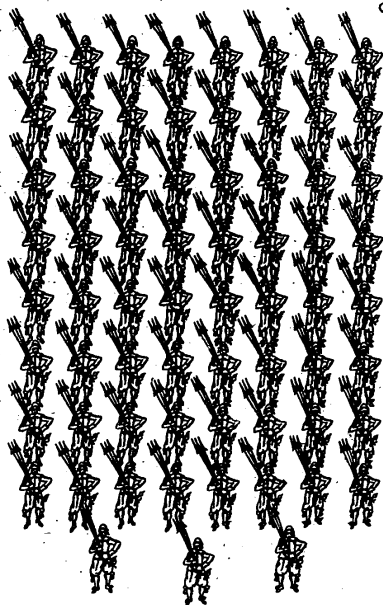


The Front

*A Squad*



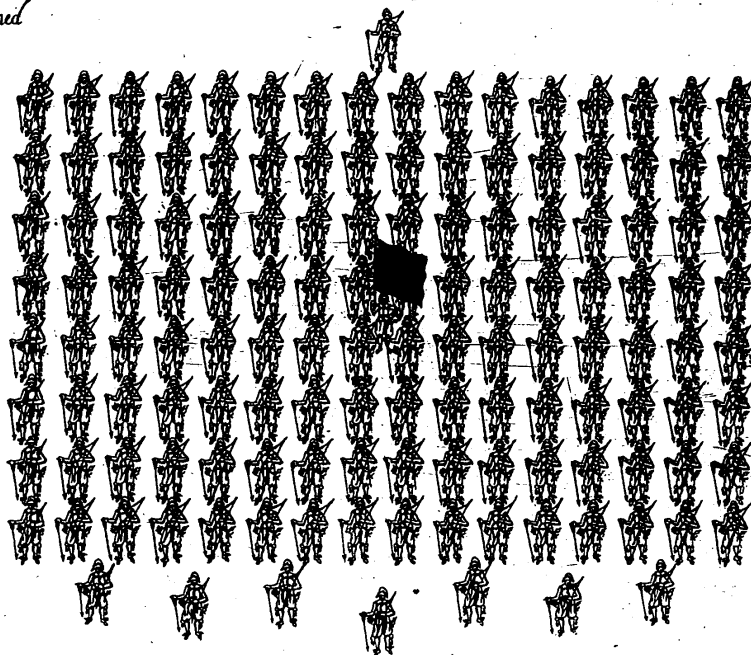
*A Detachment*



*Cap. 16*

*The Light Armed*

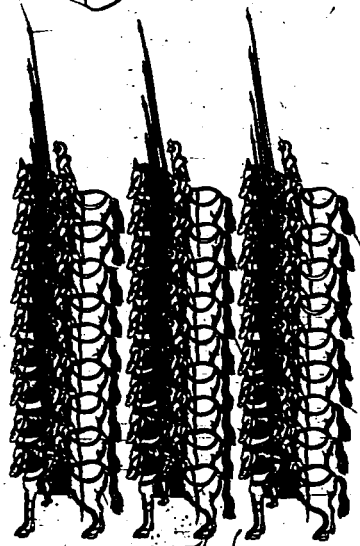
*A Century*



*The Front*

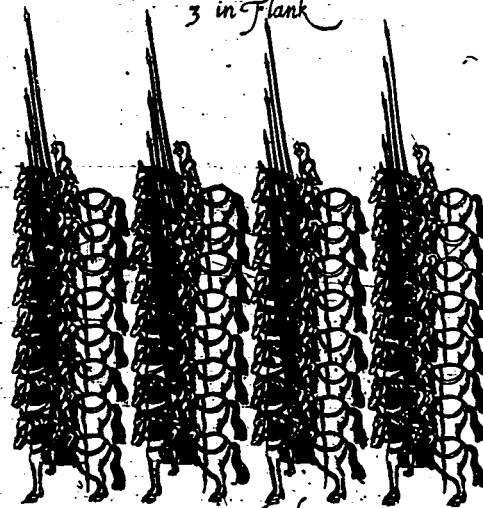
Cape 18  
The Square

9 in Front



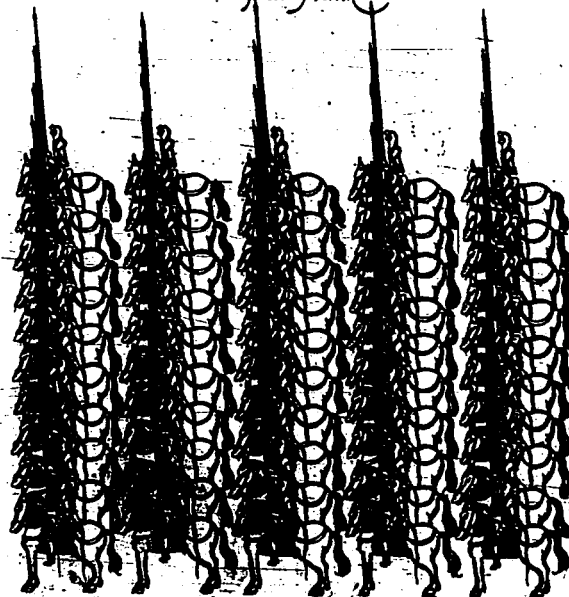
3 in Flank

8 in Front



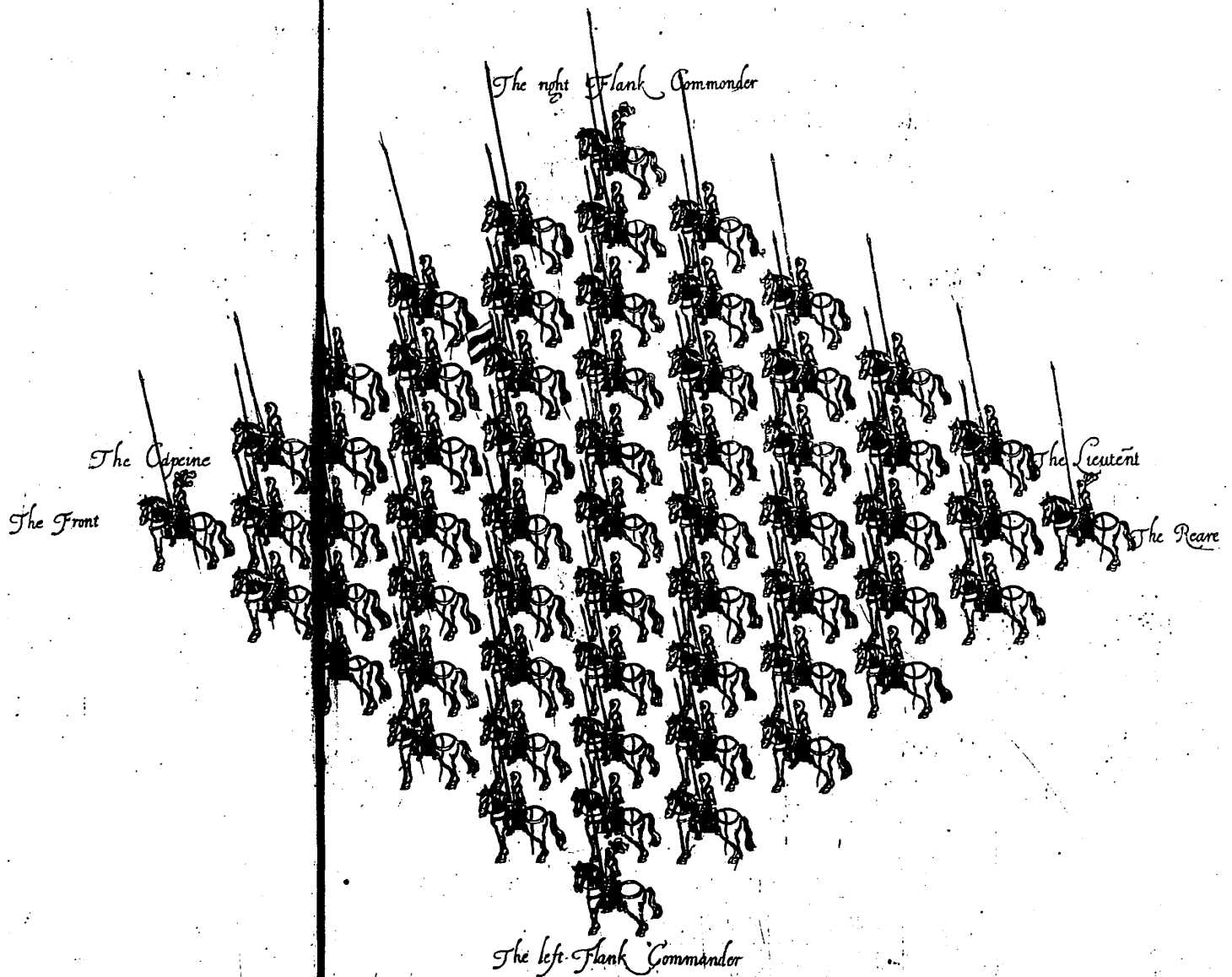
4 in Flank

10 in Front



5 in Flank

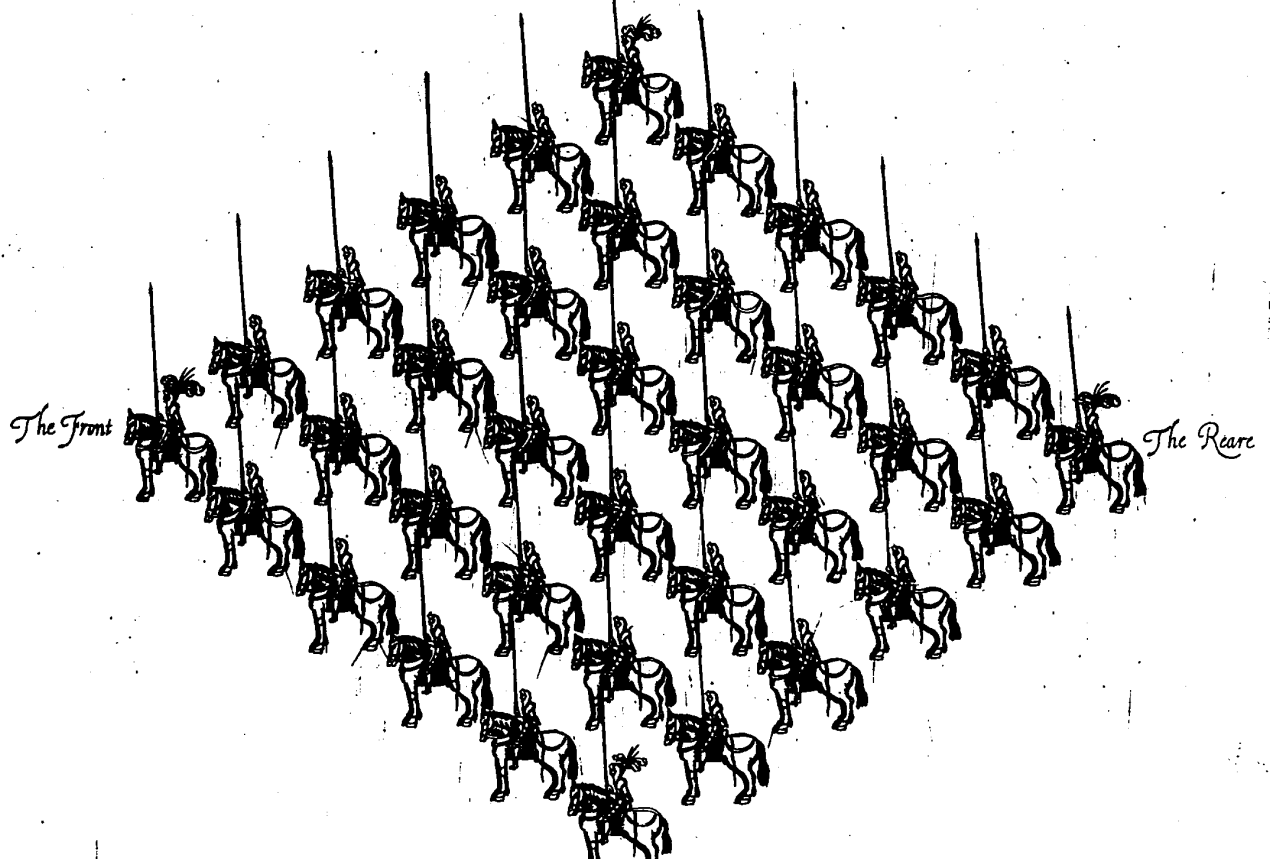
A Rhombe of Horse





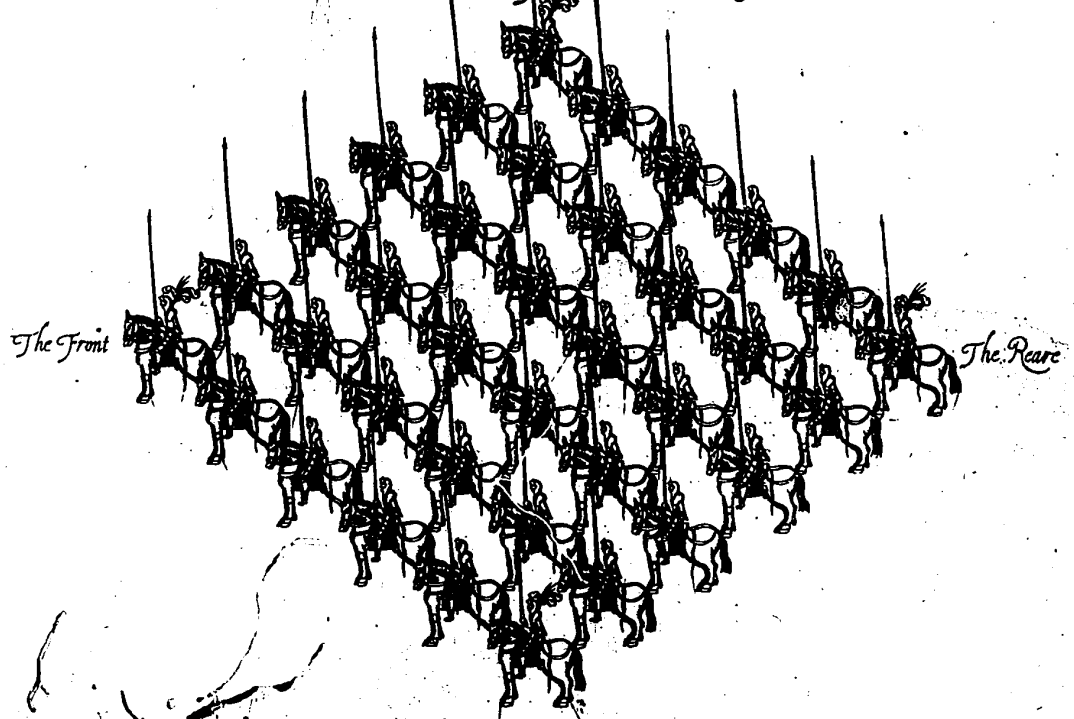
Cap. 19.

A Rhomb Ranking but not Filing



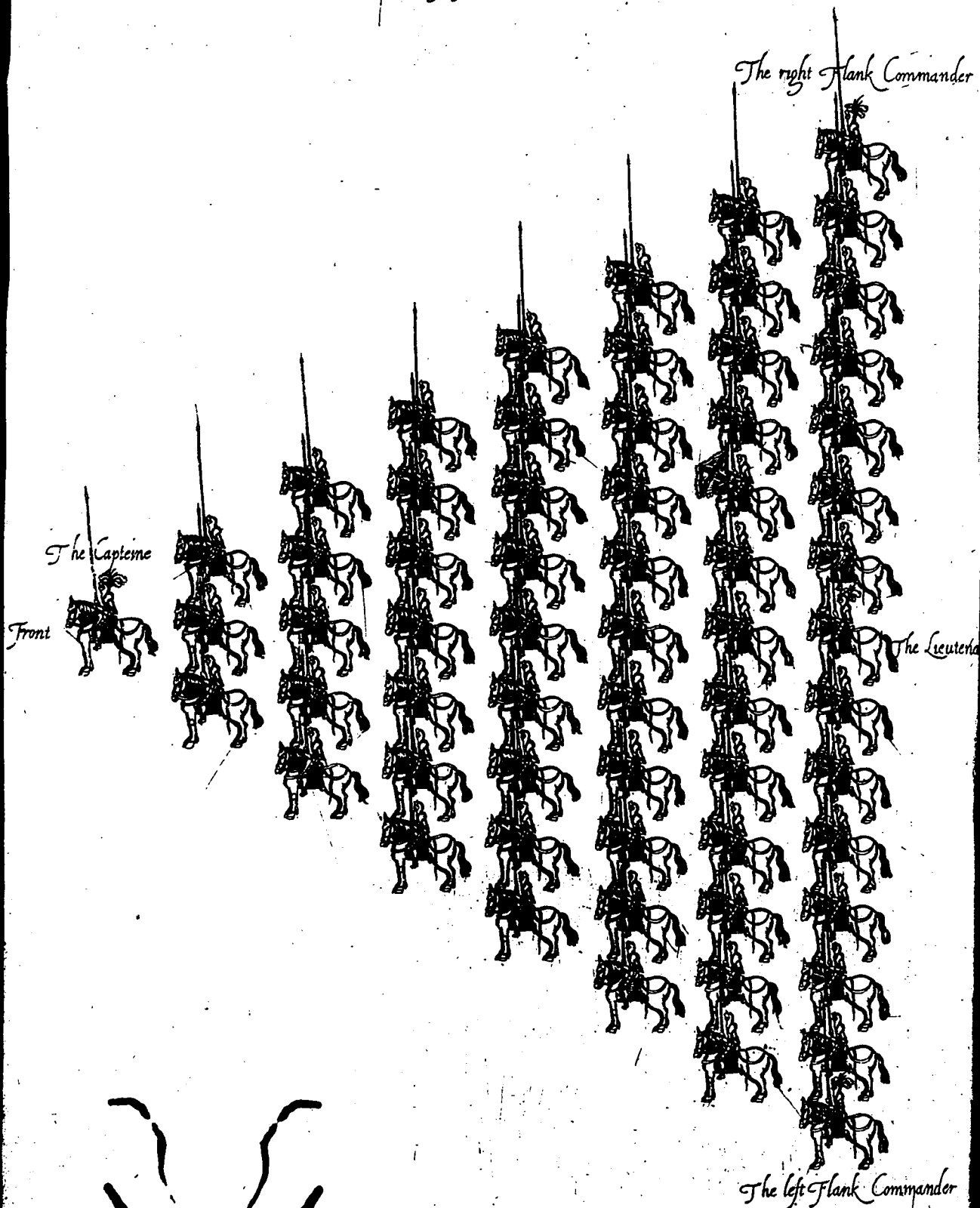
Cap. 19.

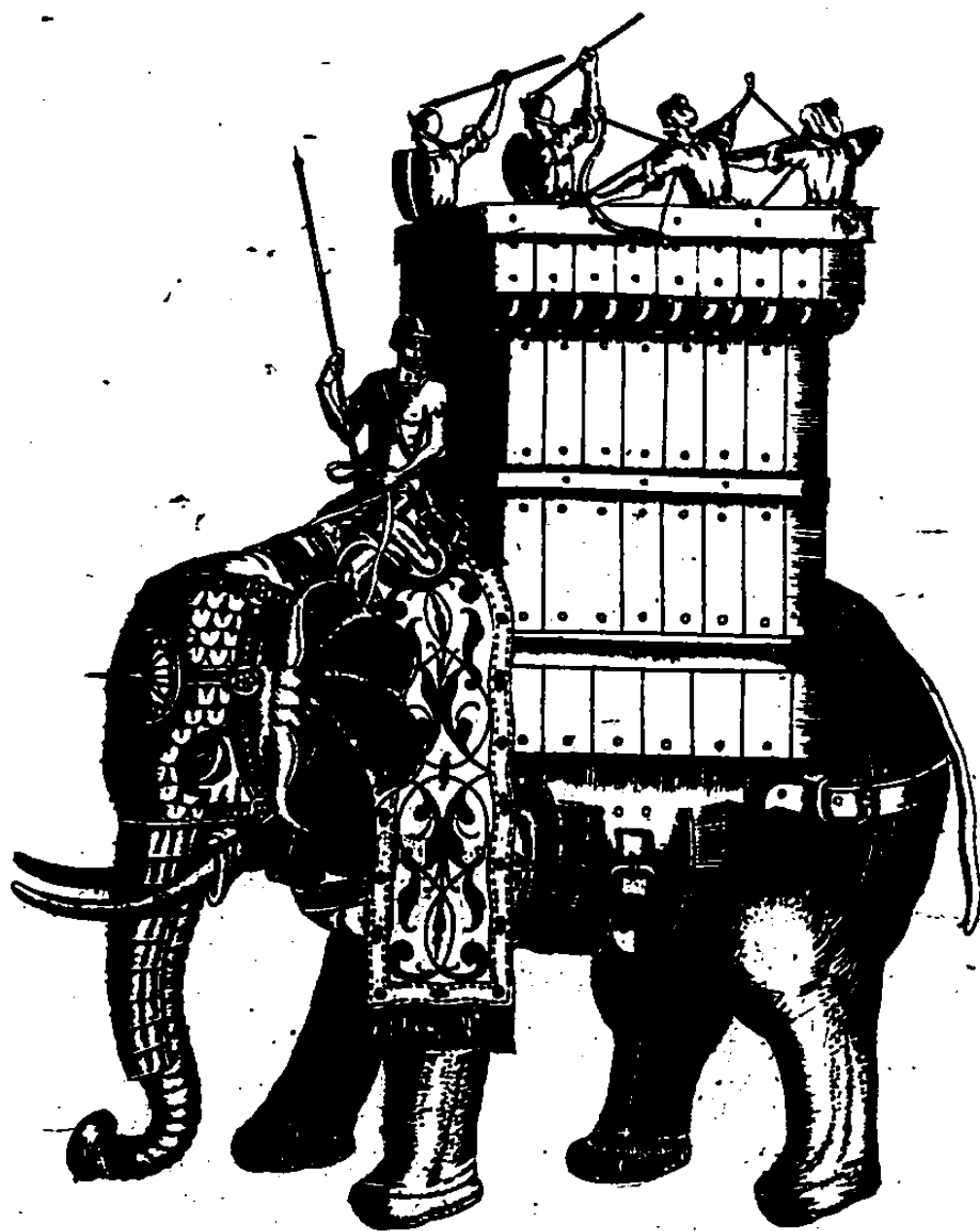
A Rhomb neither filing nor Ranking

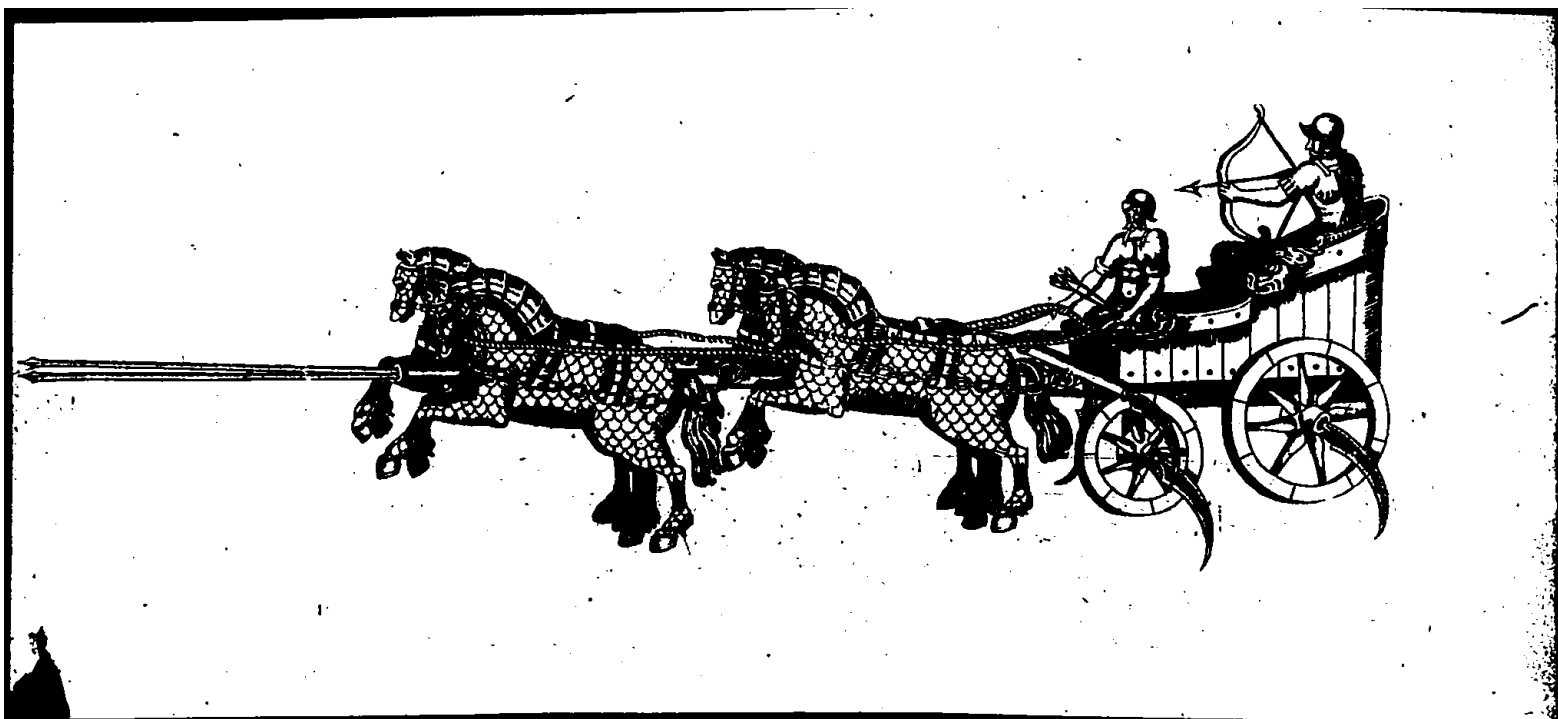


Cap. 20.

The ordinary horse trolope  
consisting of 64





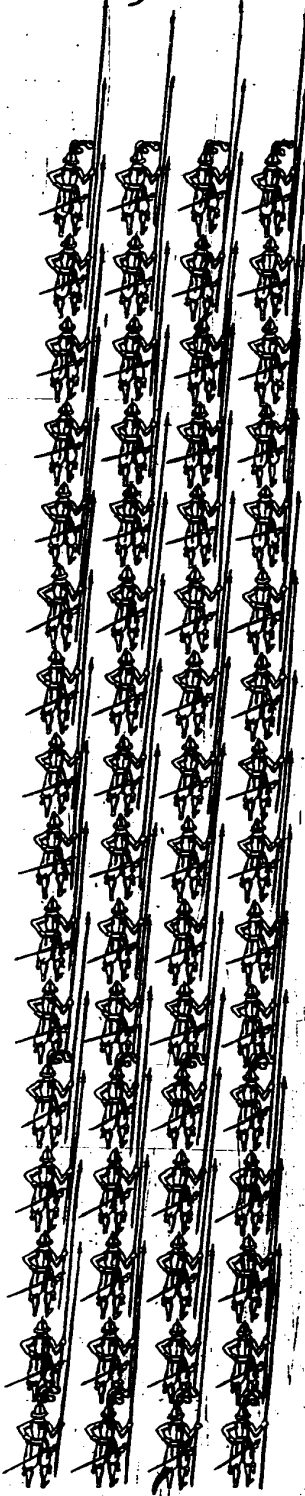


Marche or Faces turned  
to the right hand

Steps or one Turning of Faces to the  
right hand

The first standing

The Front



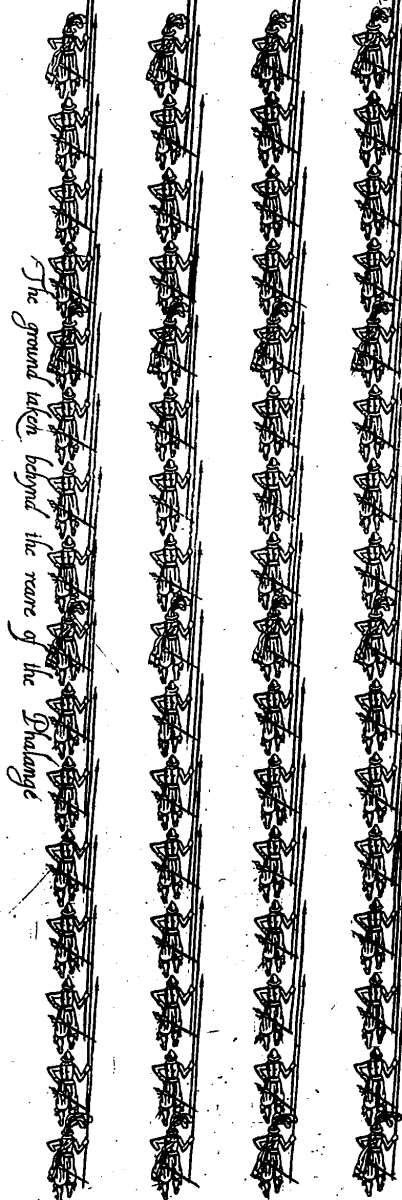
The Front



The Front

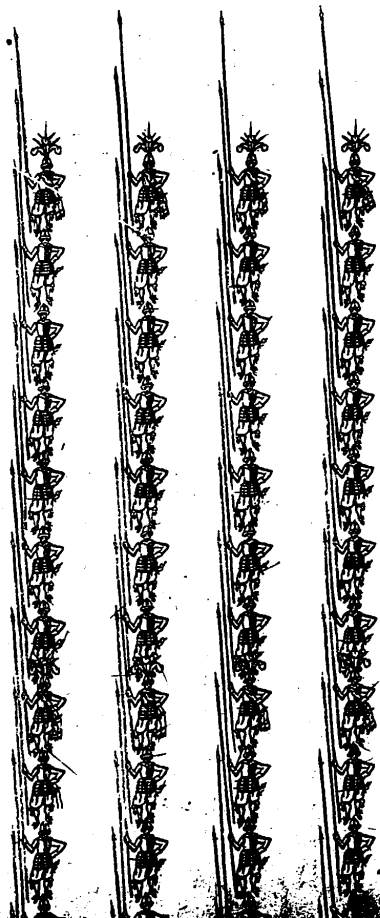
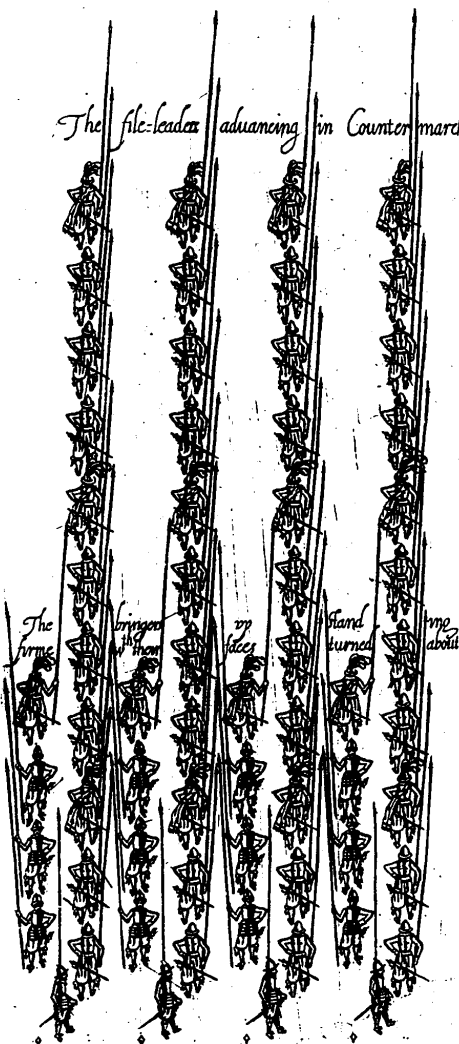
# The Lacedaemonian Countermarche

The front after Countermarche



The Countermarche in action

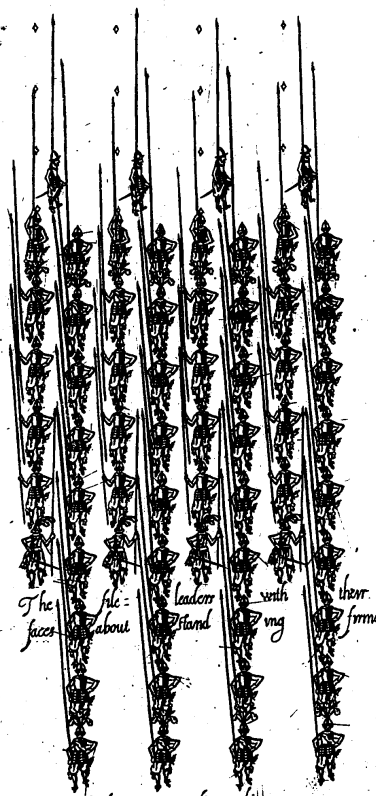
The file-leader advancing in Countermarch



The Macedonian Countermarch  
by file

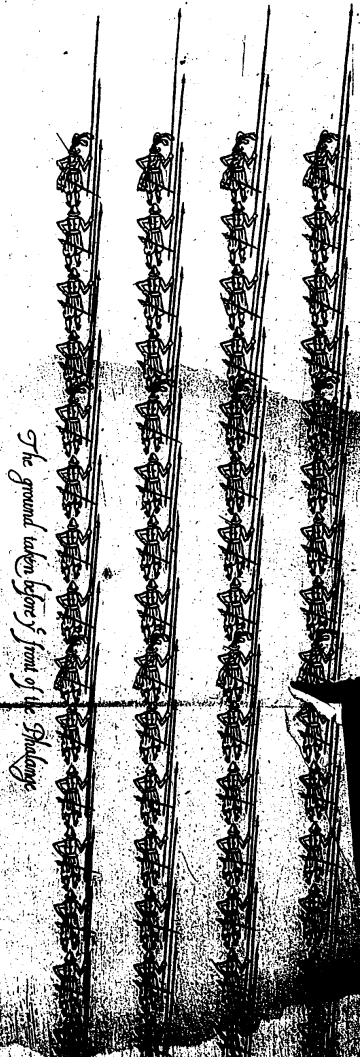
The rear

The Countermarch in action



The bringers up dismarching

The front after Countermarch



The front of the first standing

# The Grecian Countermarche

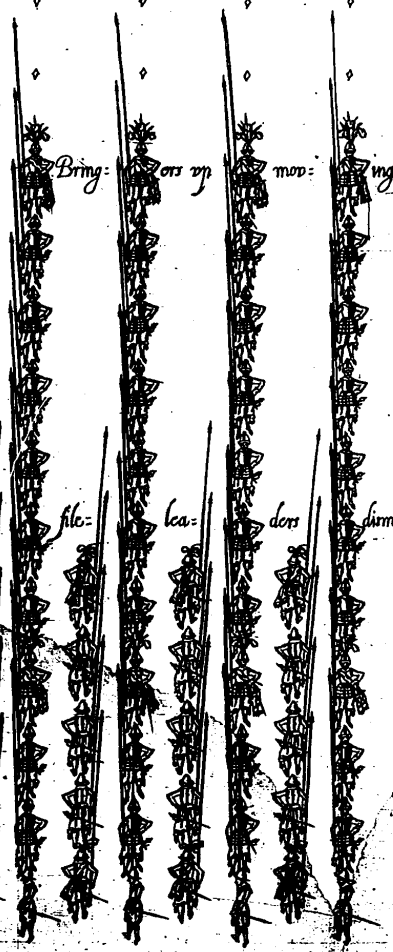
The front after Countermarche

The Countermarche in action

The Bring: ers up mov: ing

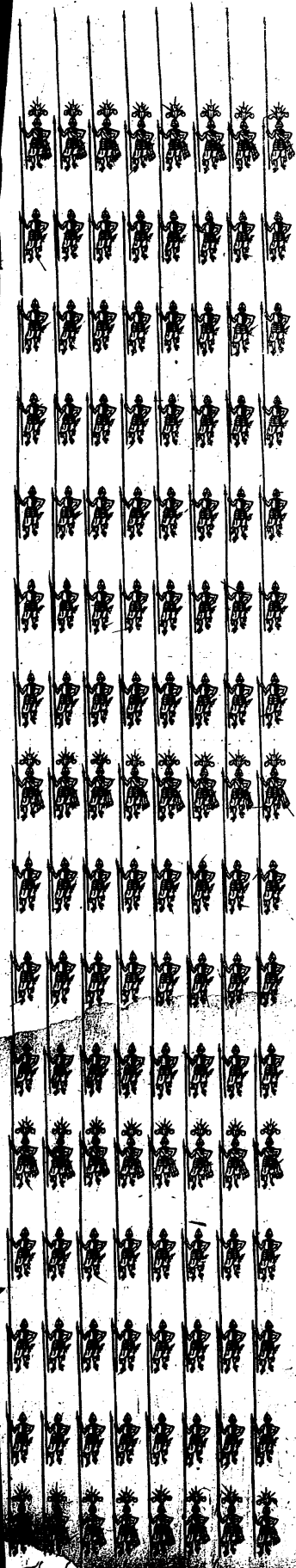
The file: lea: ders surmarching

The same ground kept after the Countermarche made



The Front in the first standing



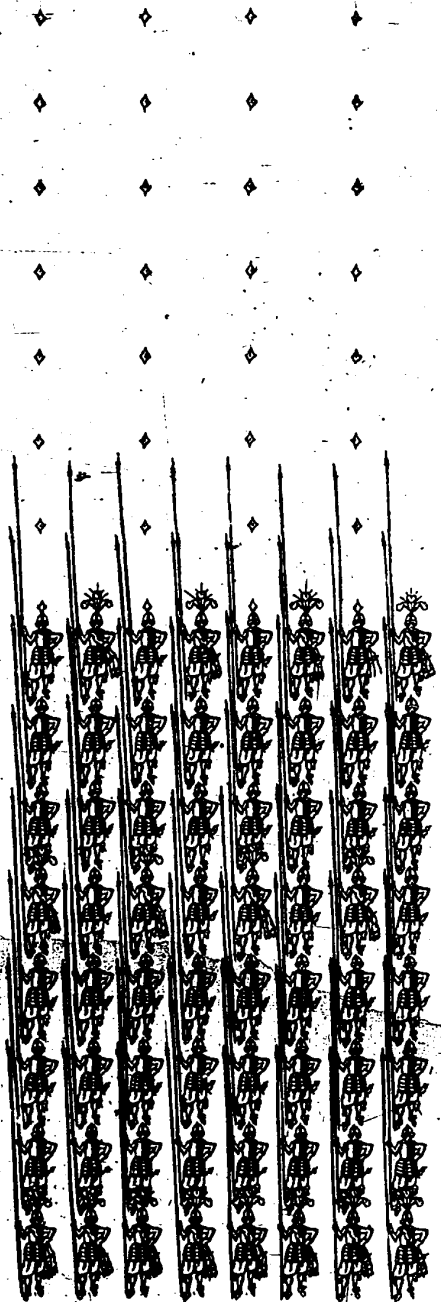


Cap 29  
Dobling of Ranks

Dobling of ranks in action



The front before Dobling of ranks



The front after Dobling of Ranks

Cap 29  
 Doubling y<sup>e</sup> Depth  
 or files

The even files intercalate into the odd  
 by doubling

The depth doubled by Counter-march

The first posture

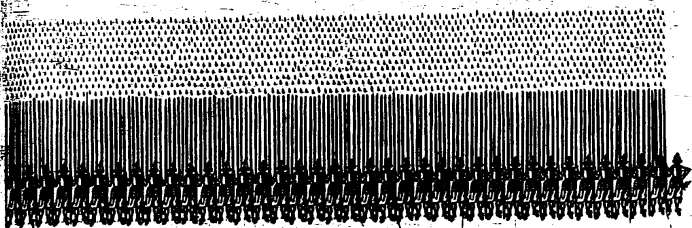


The first posture

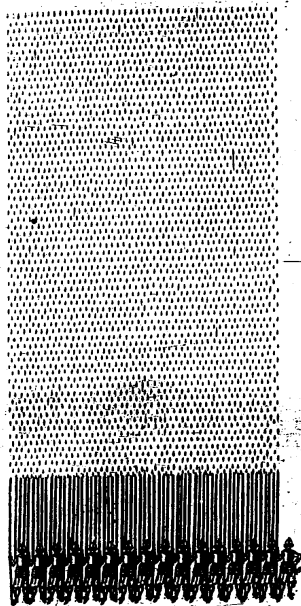


*Plagophalanx or the Brode-Fronted  
Phalange*

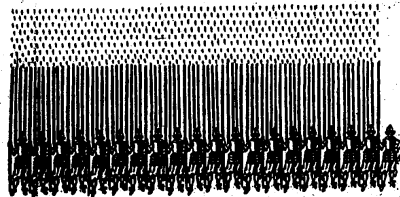
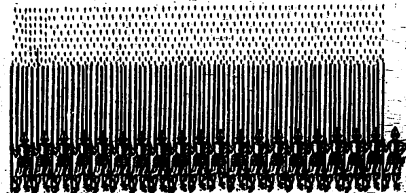
*Cap 30*



*Orthophalanx or the Flane*

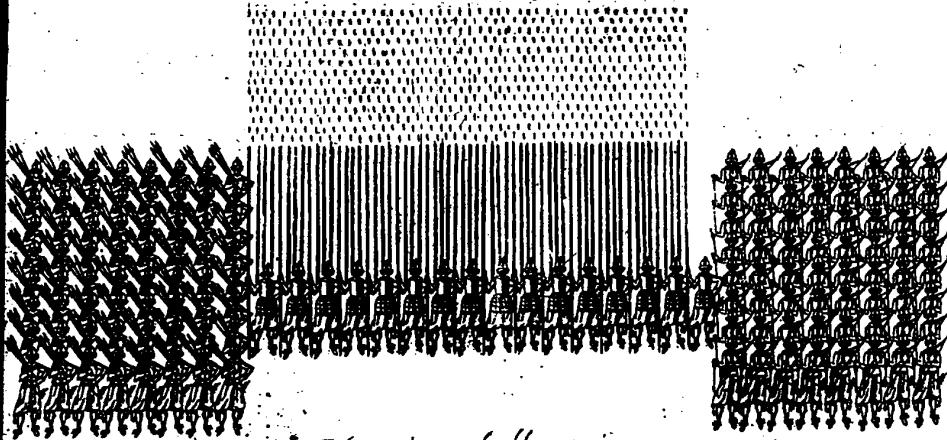


*Loxe-Phalanx or the monen-fronted  
Phalange*



*The Front*

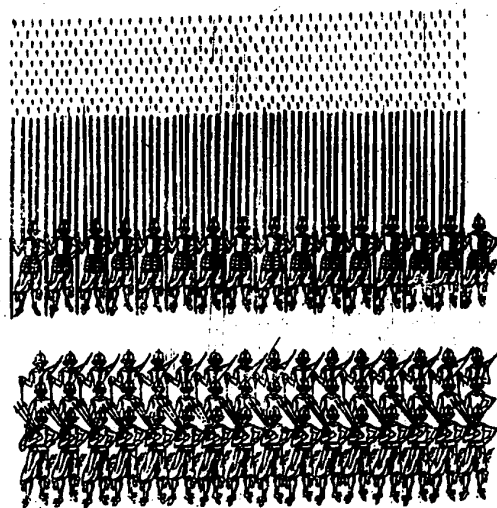
Cap. 31



*Hypotaxis, or double-winging*



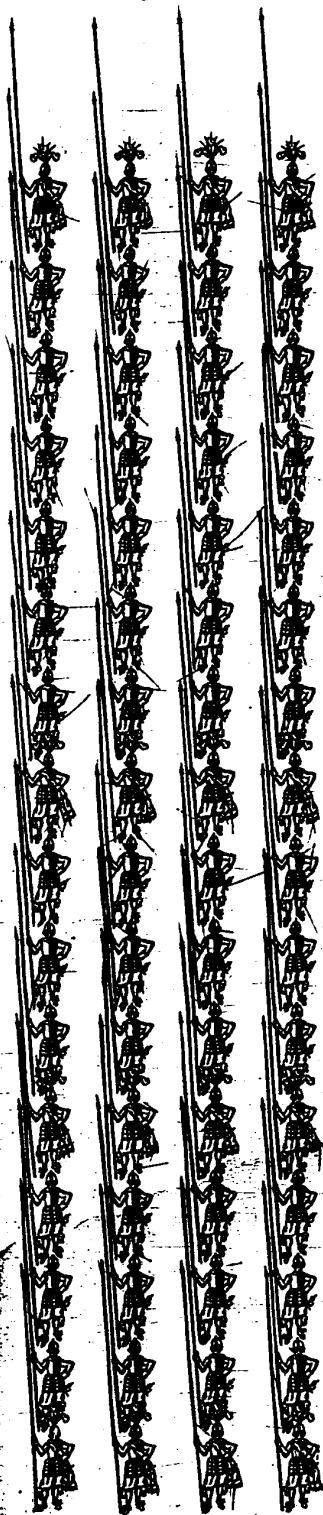
*Entaxis, or insertion*



*Prothesis, or foregrounding*

Cap: 32.  
The manner of wheeling

The first posture

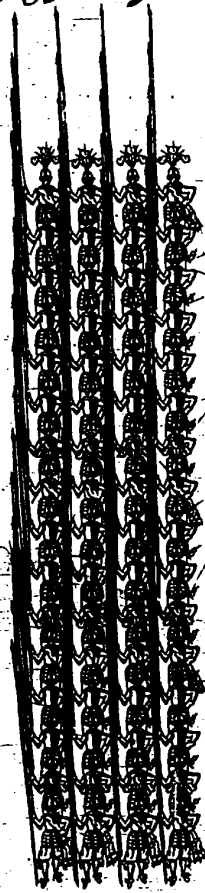


Closing of files



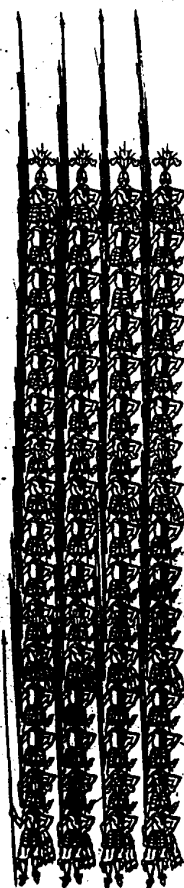
The Front

Closing of ranks forward

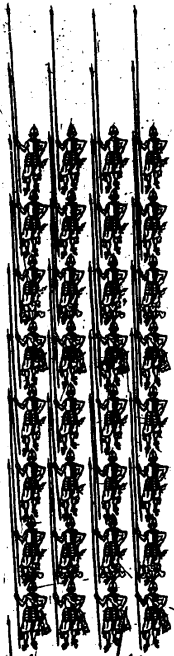


Cap: 32.

The action of wheeling



Cap २२  
Of Cloinges



The front after closing

Closing to y<sup>e</sup> right  
and in action



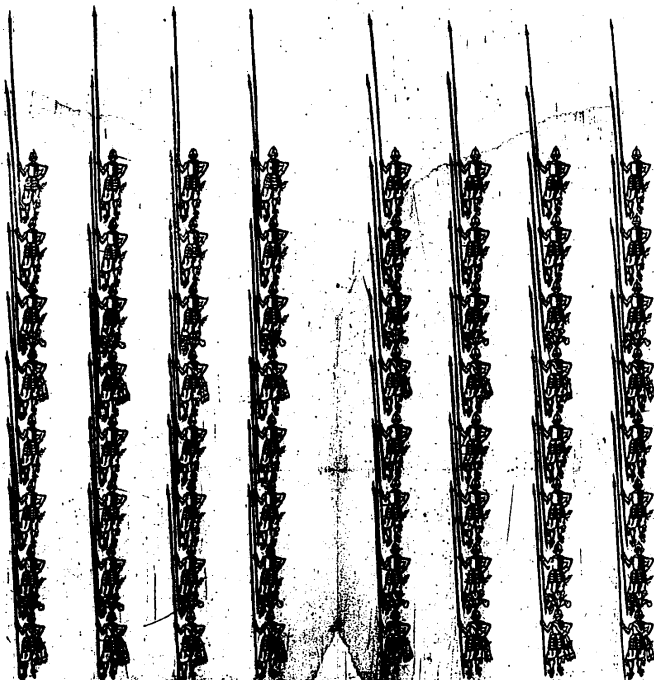
The front before closing

Closing to the middle

Closing to y<sup>e</sup>  
left hand



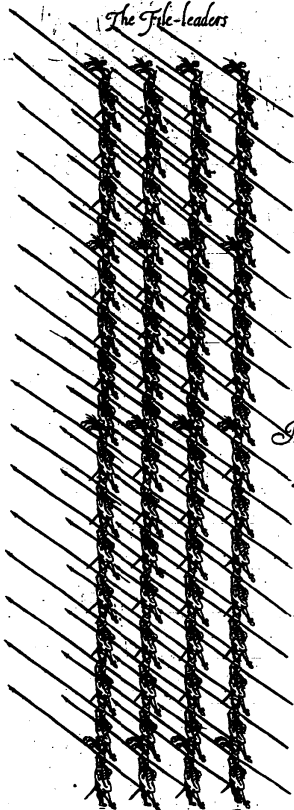
Closing to y<sup>e</sup>  
right hand



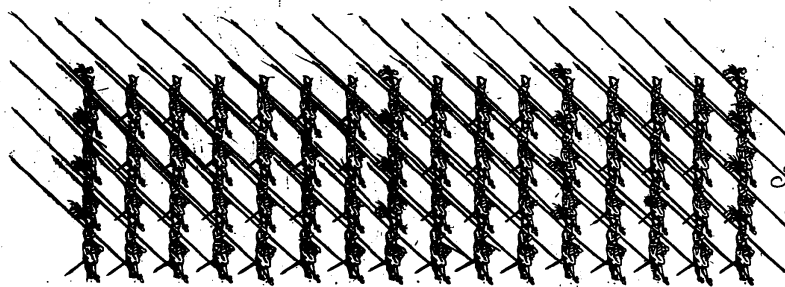
The front before closing

Cap. 36.

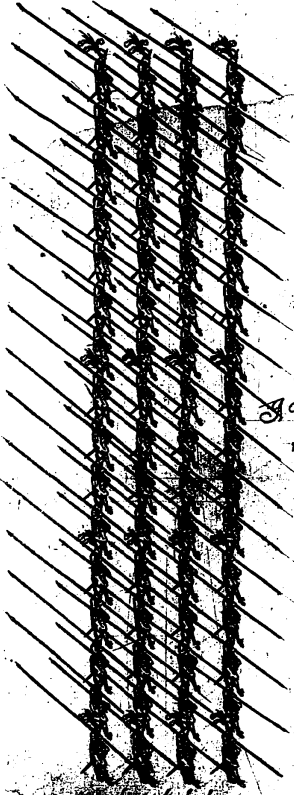
The File-leaders



A Deduction to the  
left hand



A right induction  
The Front

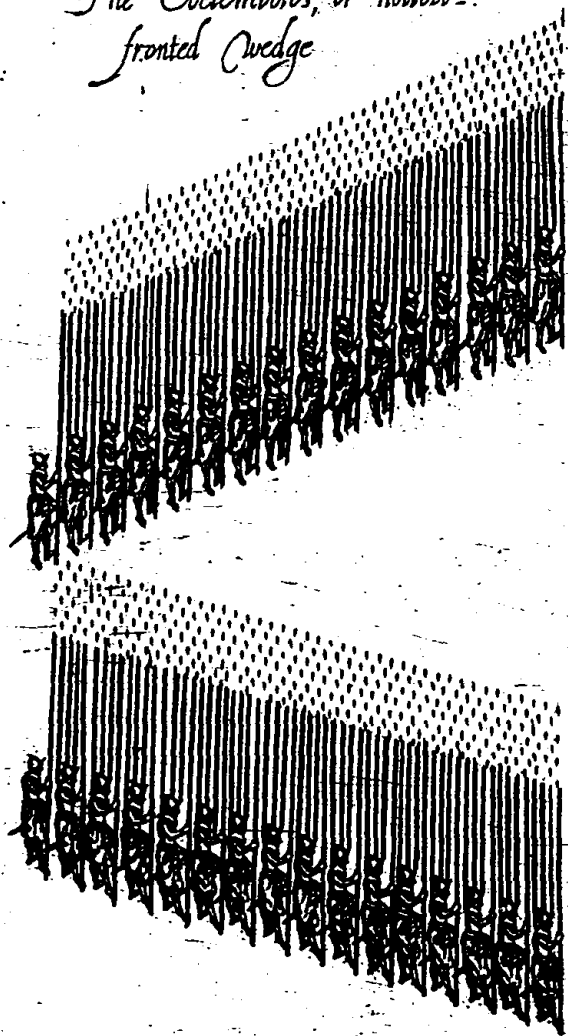


A Deduction to the  
right hand

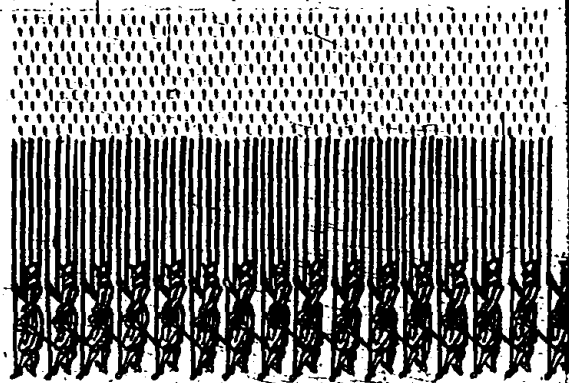


Cap. 36.

The Coelembolos, or hollow-  
fronted Cwedge



The right Induction

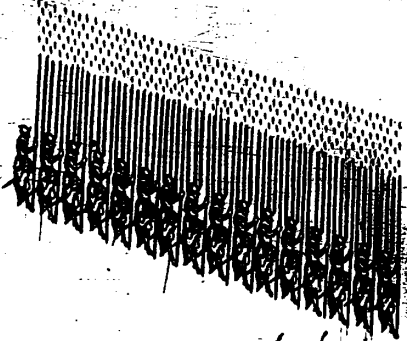
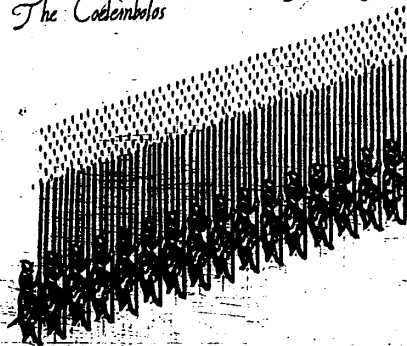


The front

Cap. 36.

The Coelembolos

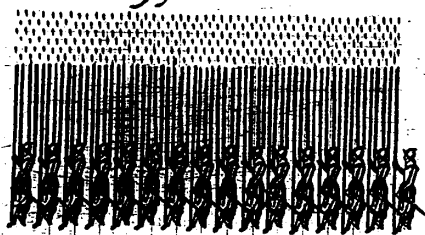
The left wing



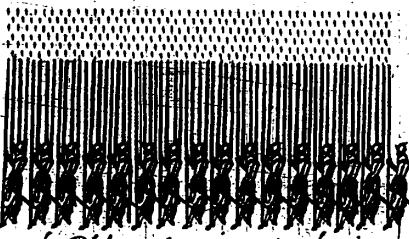
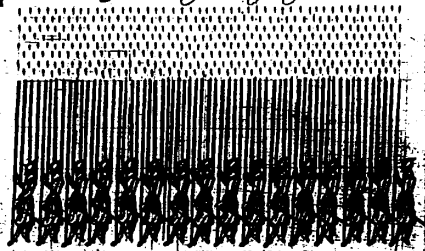
The right wing

The front

The Phalange set against y<sup>e</sup> left wing  
of y<sup>e</sup> Coelembolos

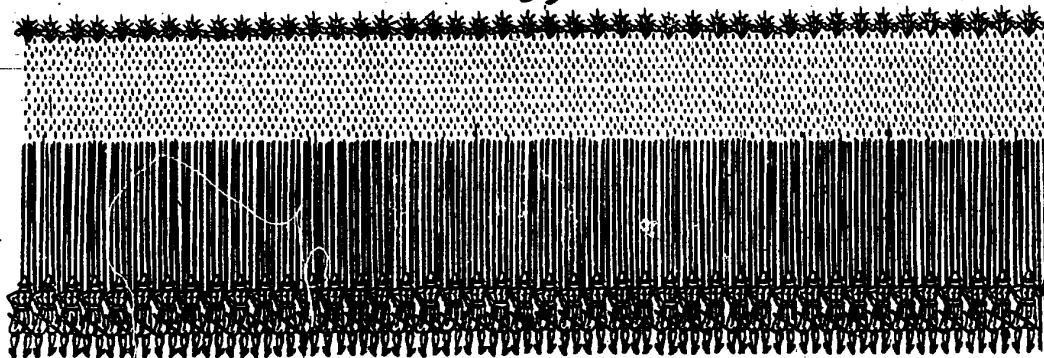


The forbearing Phalange

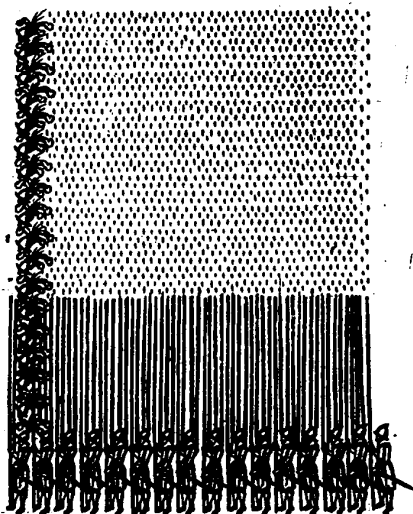


The Phalange set against y<sup>e</sup> right wing  
of y<sup>e</sup> Coelembolos

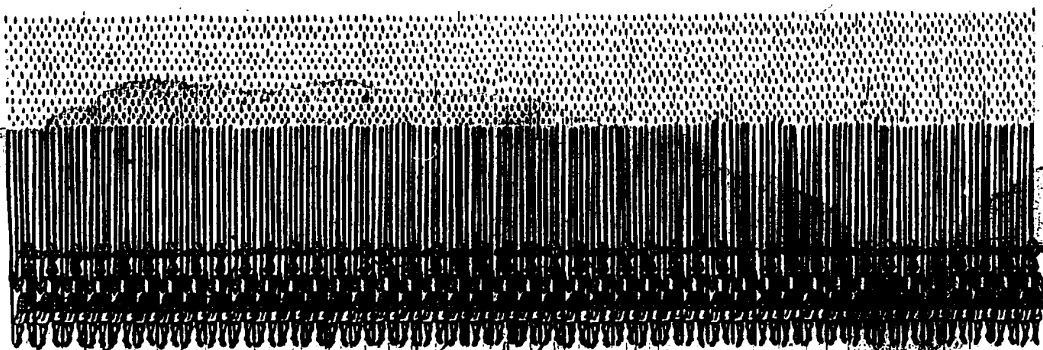
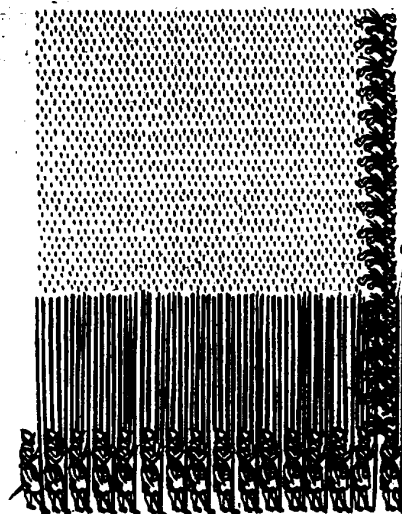
Cap. 37.  
*A four fronted Phalange against  
 all attempts of the Enemy*  
*The Front of y<sup>e</sup> reare*



*The Front of y<sup>e</sup>  
 right flank*

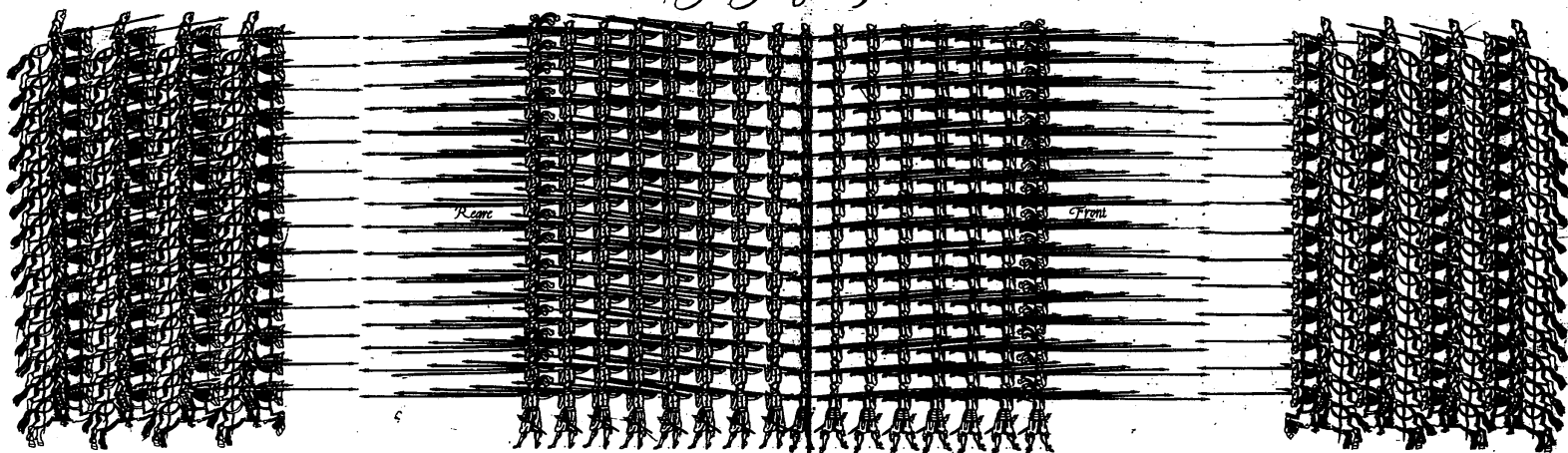


*The Front of y<sup>e</sup>  
 left flank*

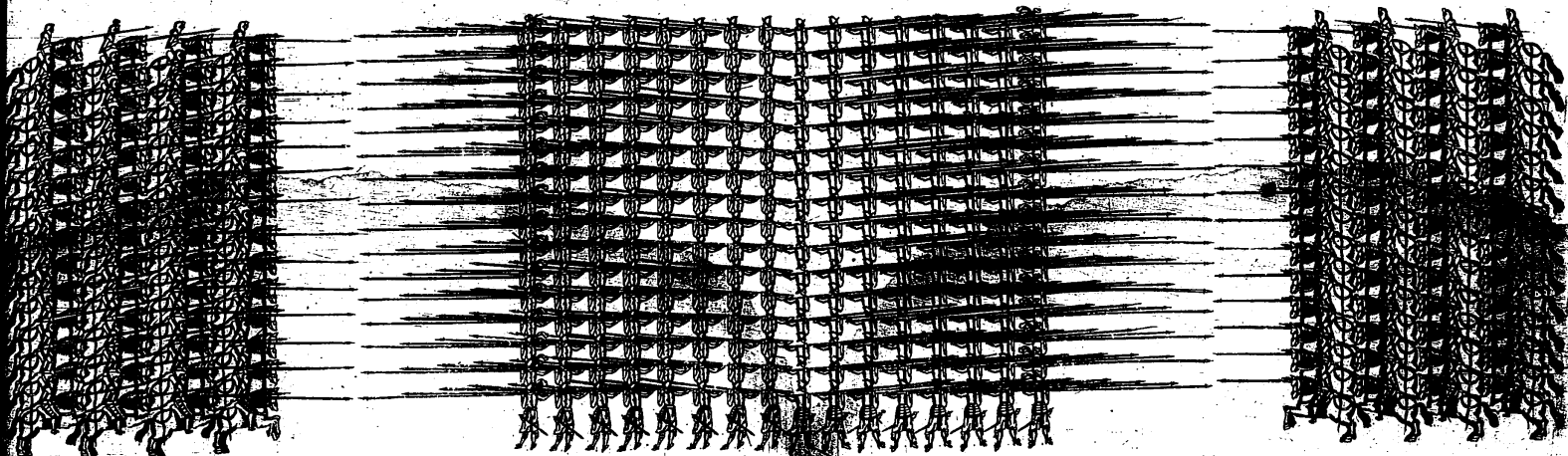


*The Front of the March*

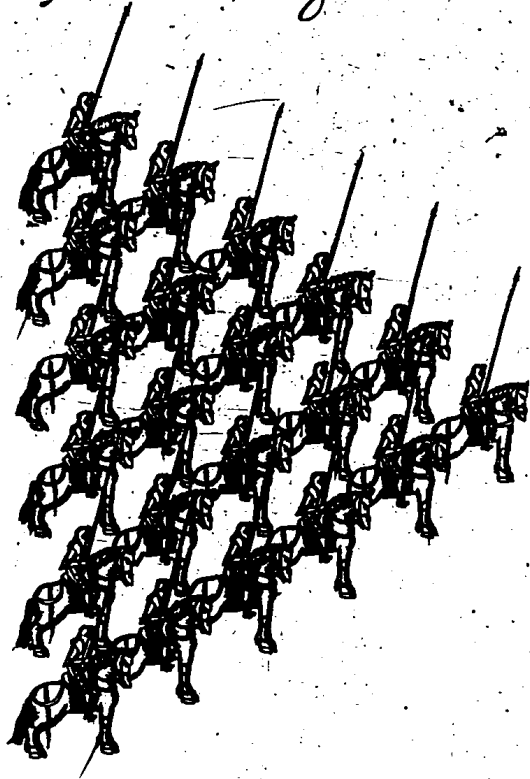
Cap. 38  
The Phalange Amphistomus



Cap. 39  
The Phalange Intusomus  
Front

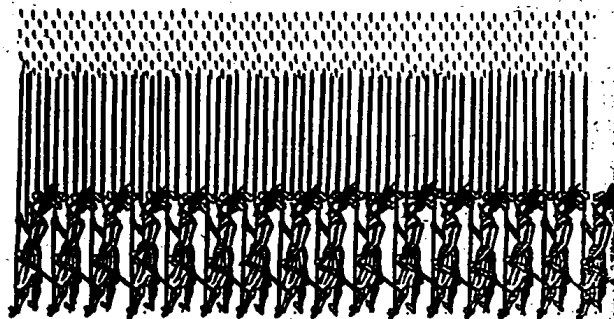


*The Horrmans Wedge*

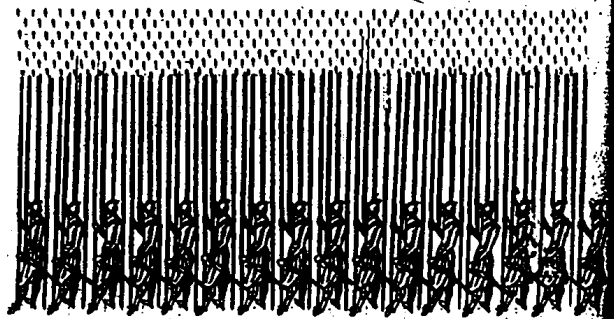


*Cap. 40.*

*A Dyphalange Antistomus*

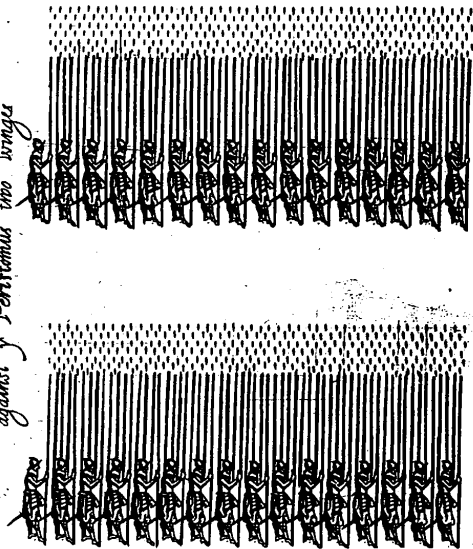


*Gironi*

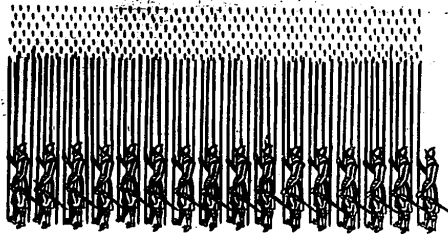


Cap. 41.

The square divided in two and set  
against y<sup>e</sup> Peristomus two wings

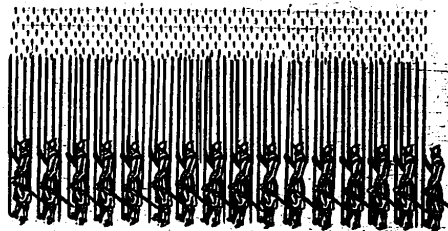


The mean front of y<sup>e</sup>  
Peristomus



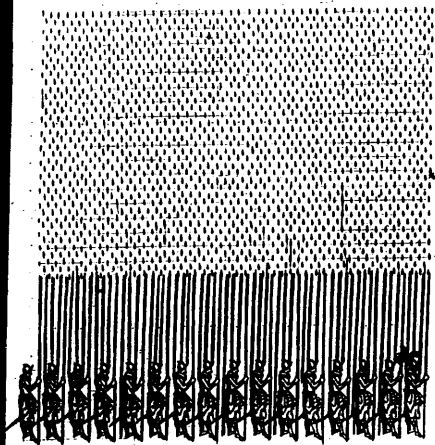
The left wing of y<sup>e</sup> Peristomus

The Diphallange Peristomus



The right wing of y<sup>e</sup> Peristomus

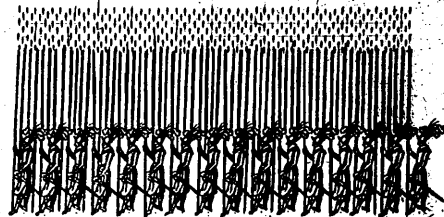
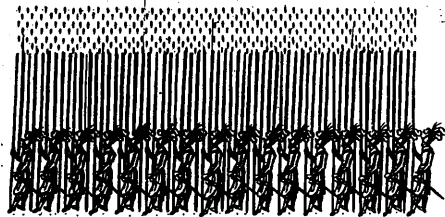
*The Battaille called Pinthium*



*Cap. 42.*

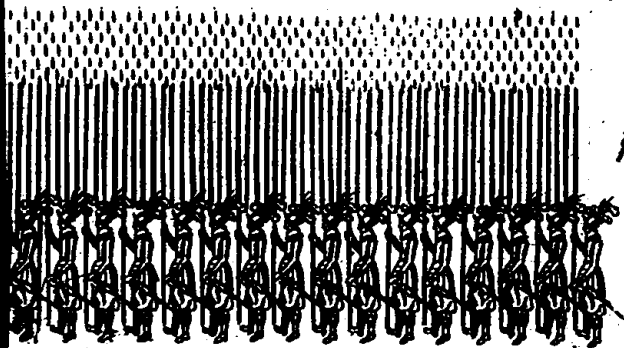
*The Diphallange Homoiostomus*

*The front*

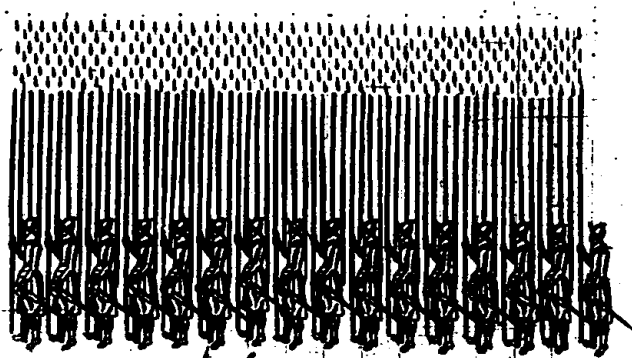


Cape 43.

The Diphalange Heterostomus



The File-leaders



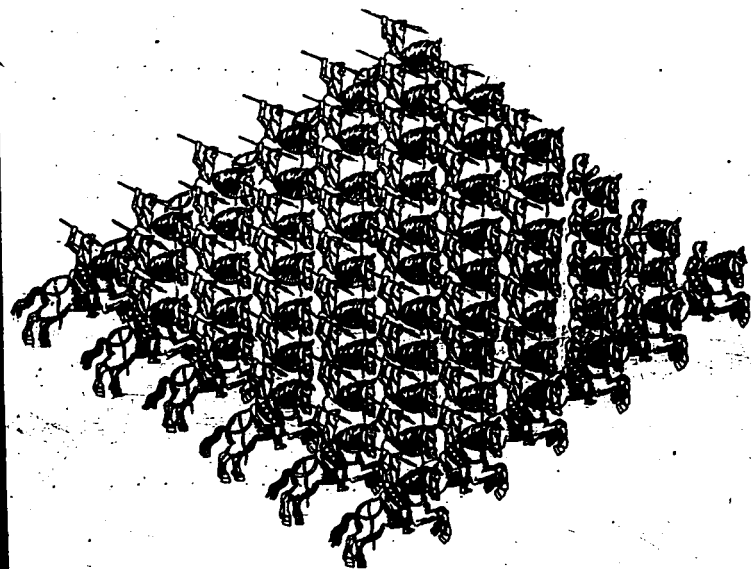
The bringers-by



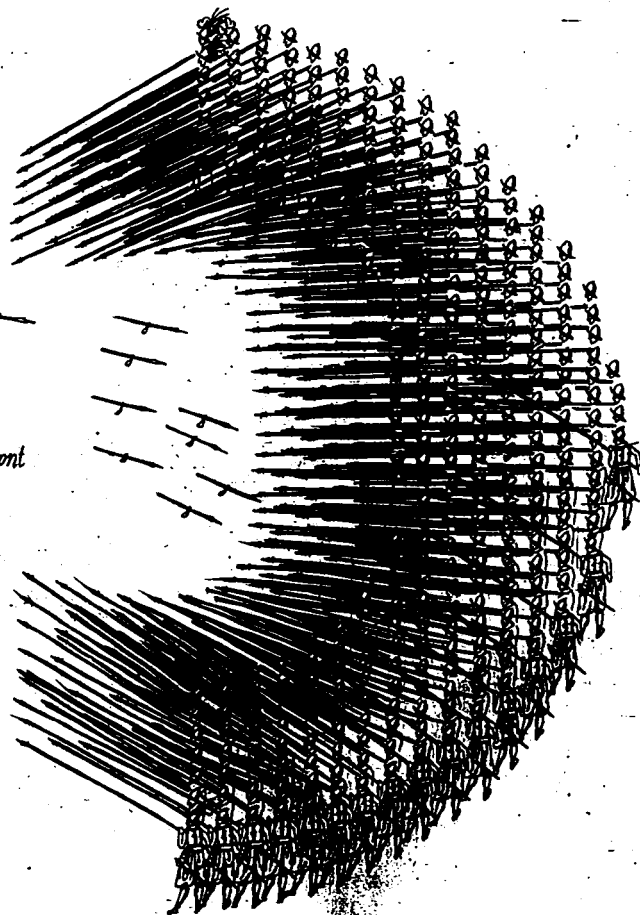
Cap. 44

The half Mame or Menoides of fate

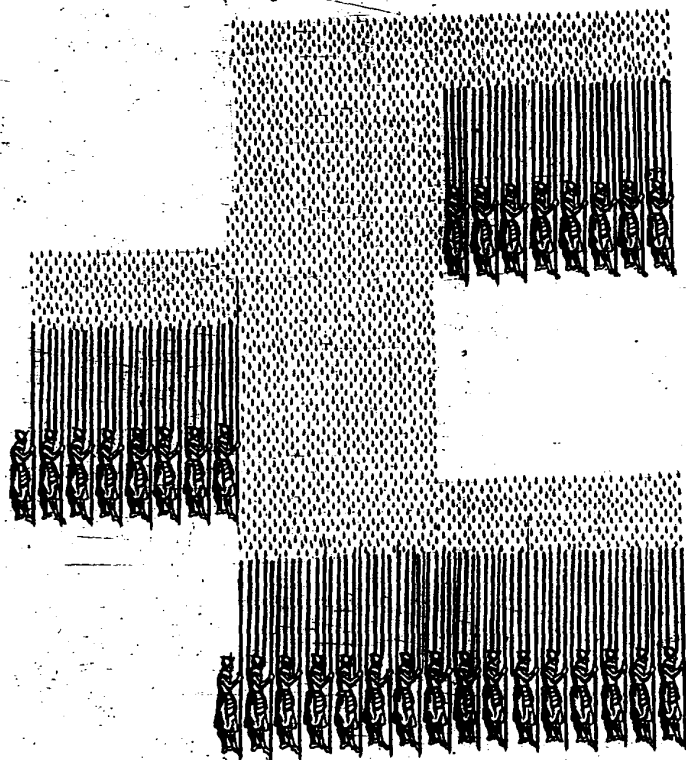
The Rhombe of Horse



The Front



*Epicamptus Emprostia*



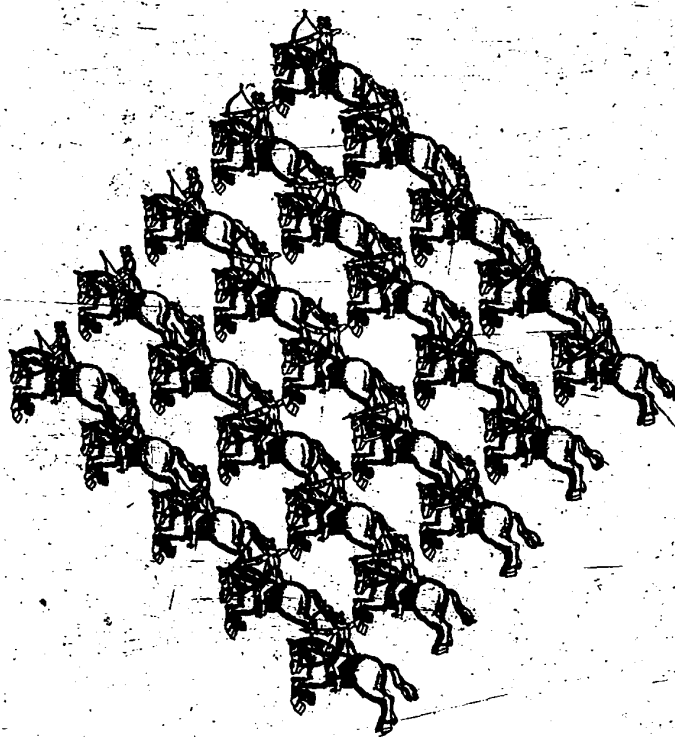
*Cap. 46.*



*The front*



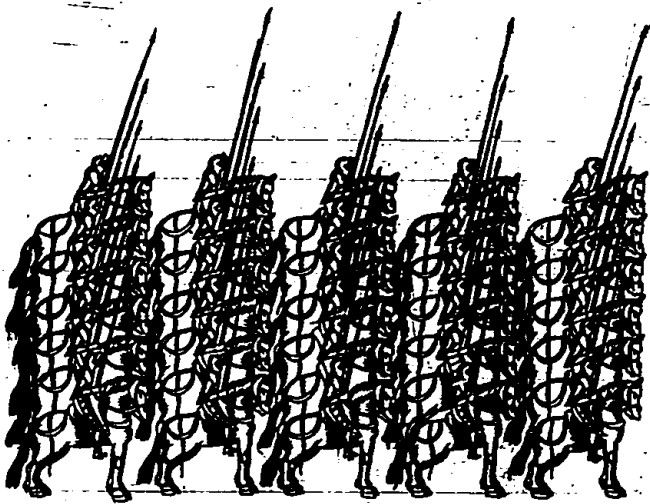
*The Rhombe*



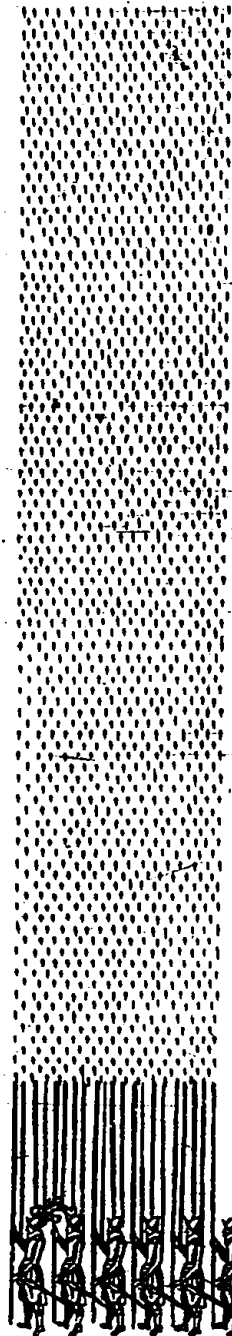
Cap: 45

Plagiophalanx, or y<sup>e</sup> broad fronted  
battaille of foote

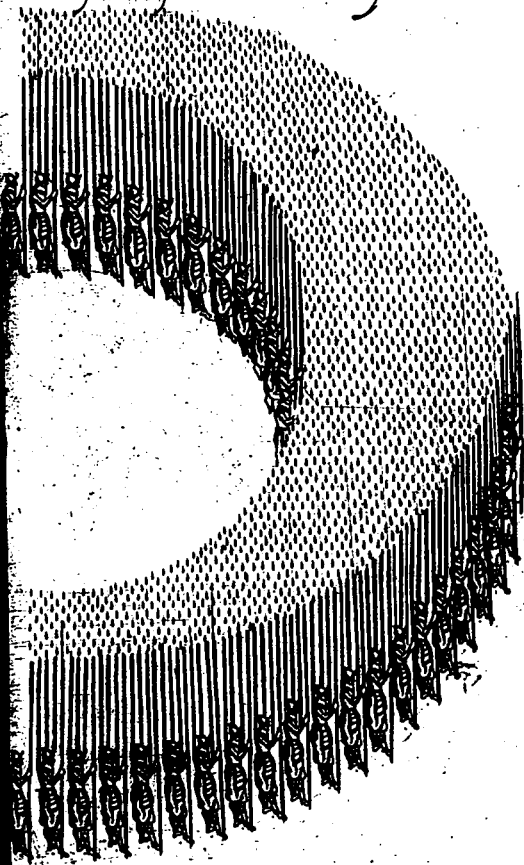
Heteromekes or y<sup>e</sup> Horse of Horse



The front



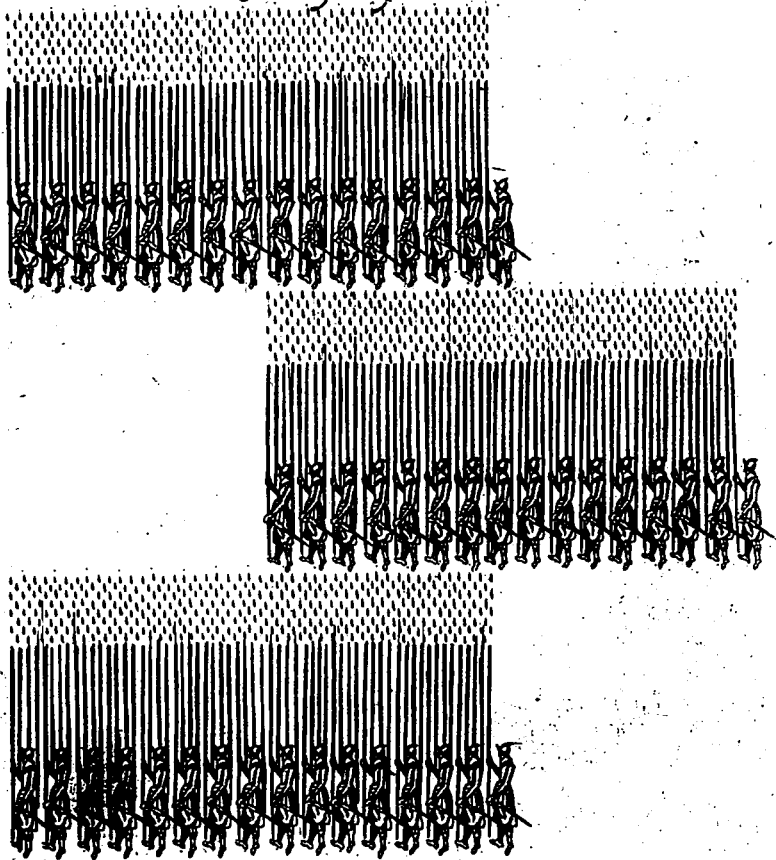
The Gyrtle or conuex half Krome



Cap. 47.

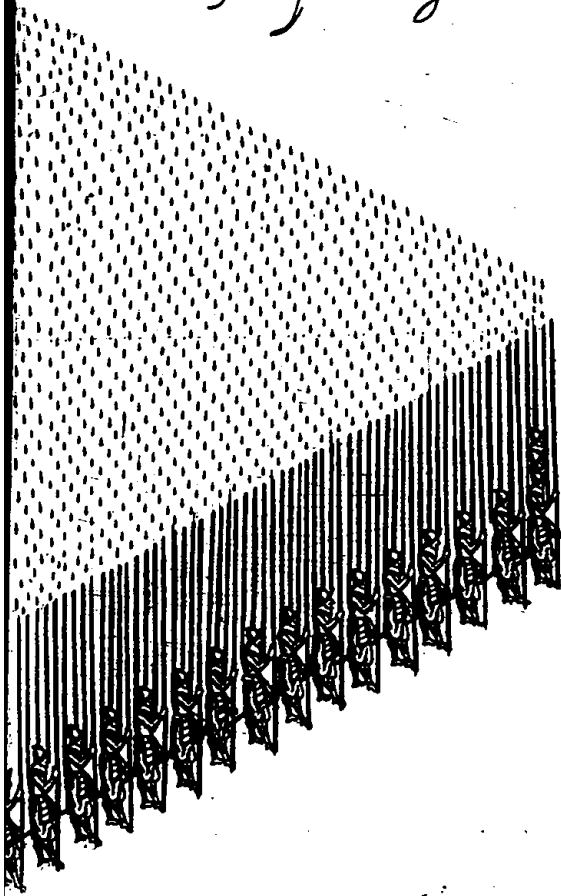
The front

The Epucampios



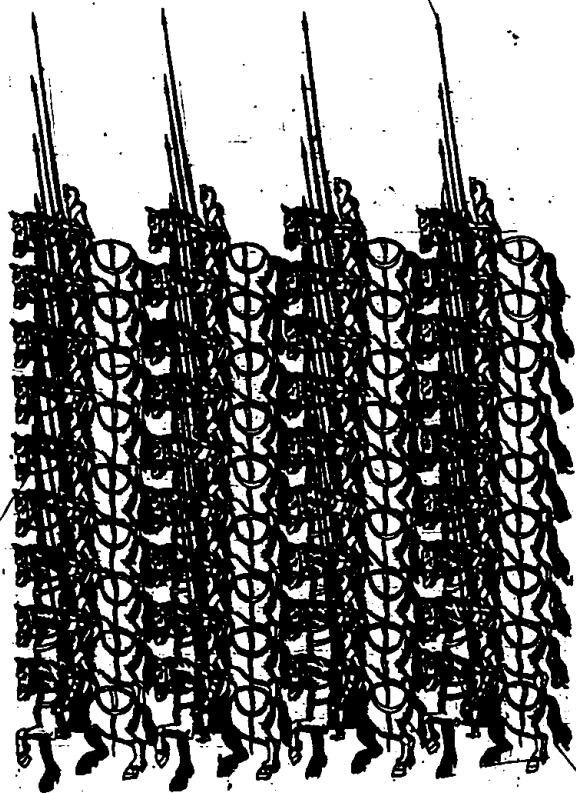
Cap. 48.

The fore wedge



The front

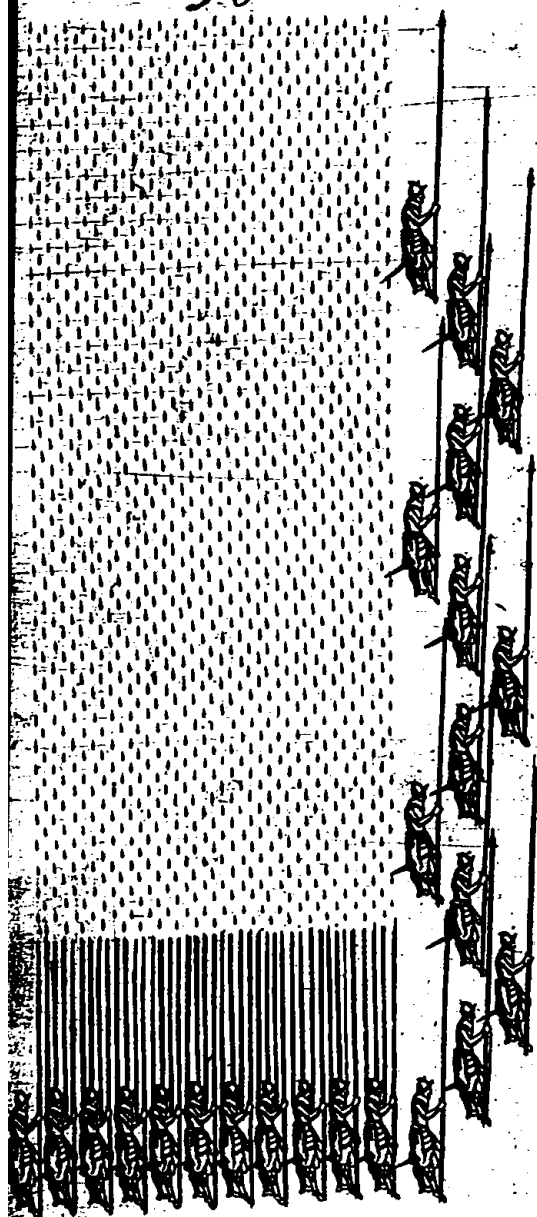
The Horsbattaile square in figure,  
not in horse



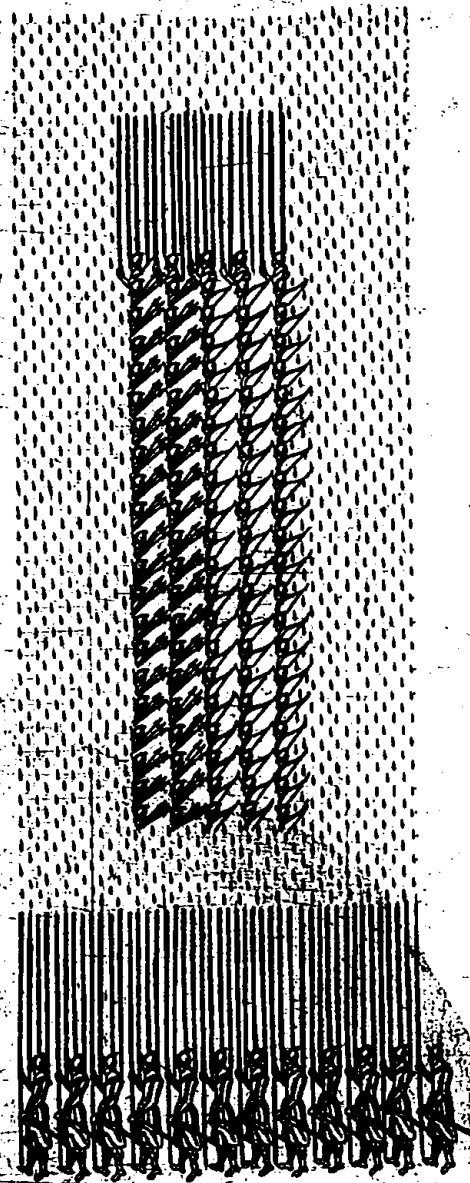
*The Peplegmene*

*Cap. 49*

*The Plesium*



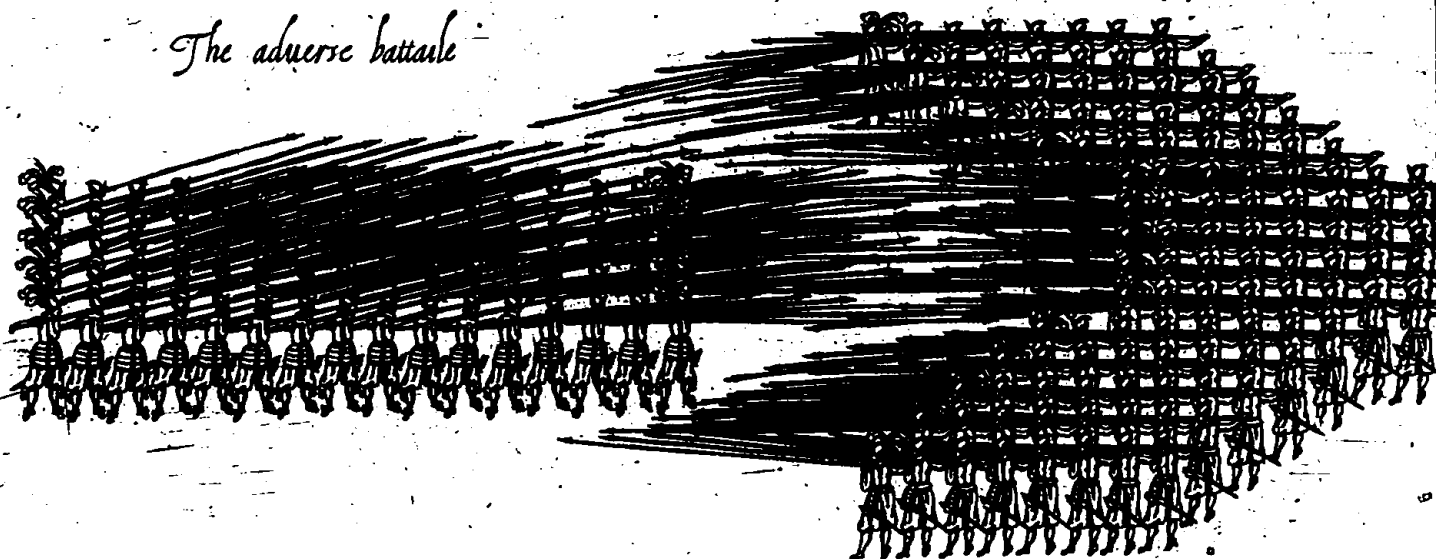
*The front*



Cap. 50.

The adverse bataille

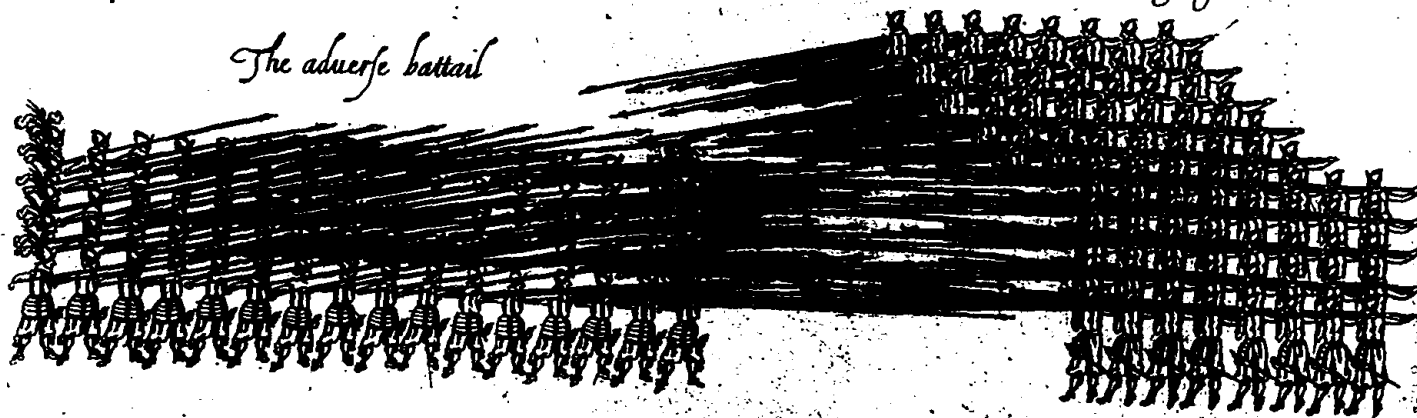
The overfringing bataille



Cap. 50.

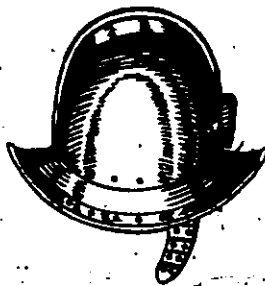
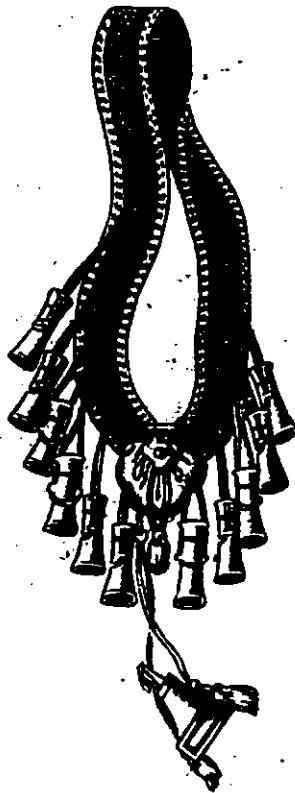
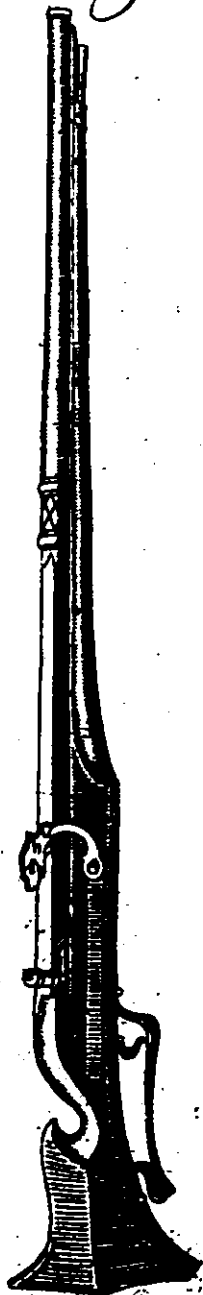
The overwinging battail

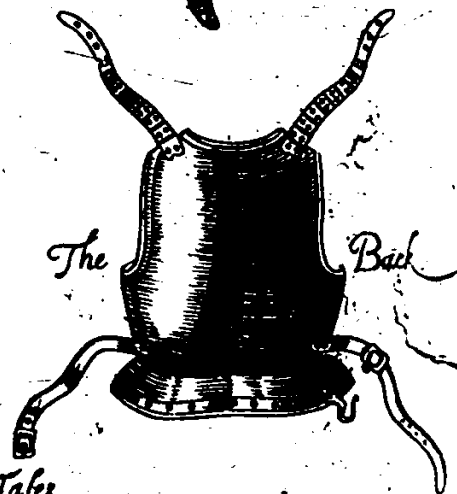
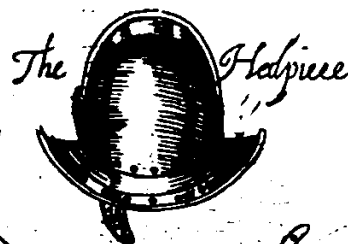
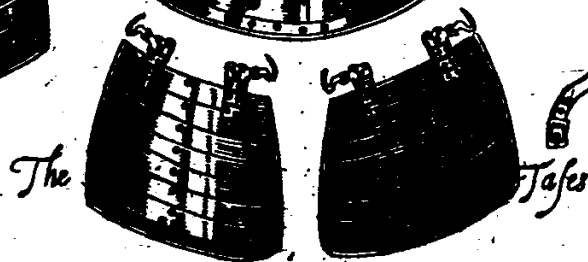
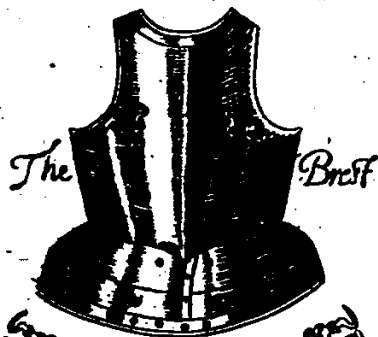
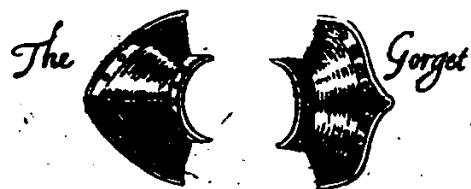
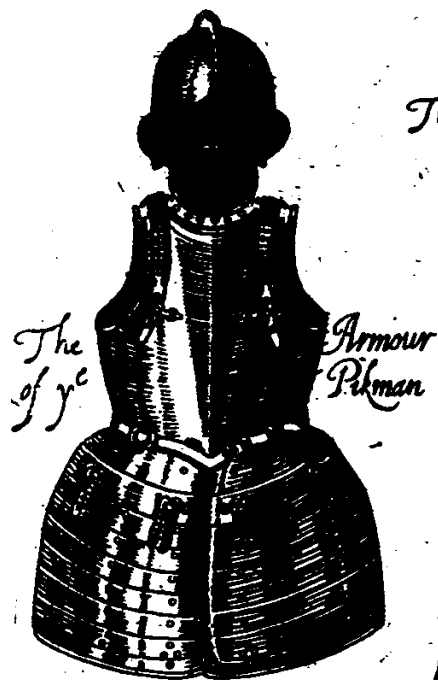
The adverse battail





*The armes of y<sup>e</sup> Musketer*



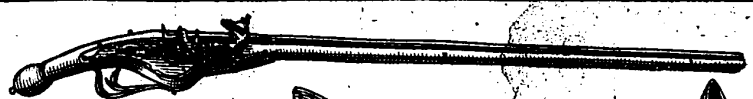


The Pike

A long, thin pike with a pointed tip and a crossbar. The label "The Pike" is written in cursive below the pike.



The headpiece.



The headpiece close.

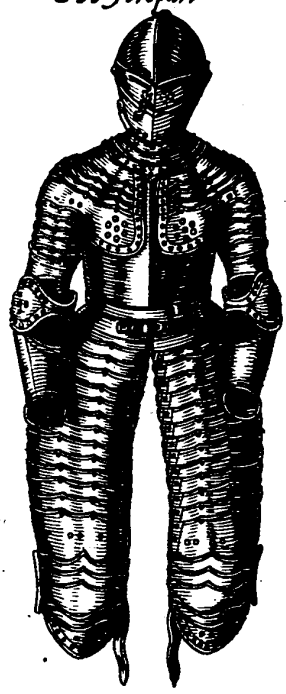


right let gant

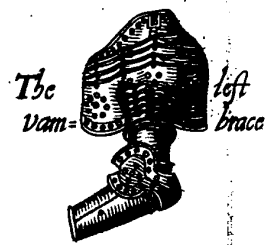
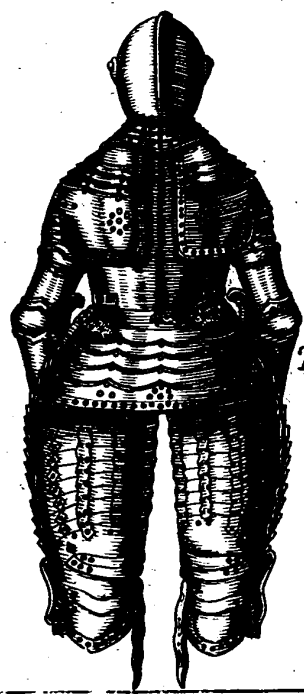


left let gant

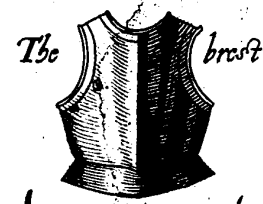
The forepart



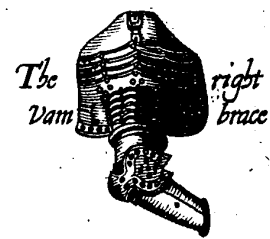
The back



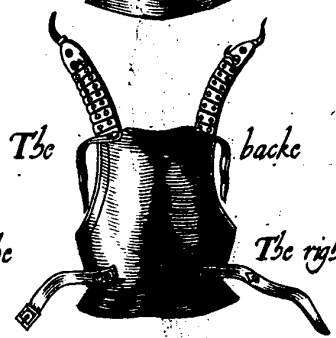
The vambrace left



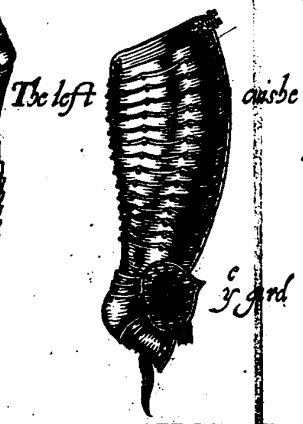
The breast



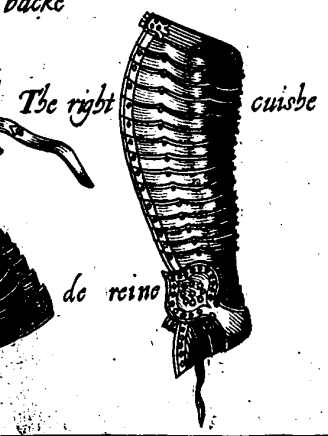
The vambrace right



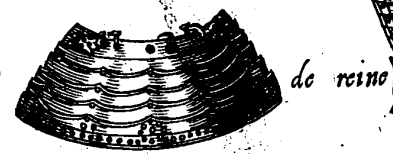
The back



The left cuisse



The right cuisse



de reins